

MICHIGAN STATE TRANSPORTATION COMMISSION
PUBLIC MEETING
AGENDA

DATE: Thursday, July 18, 2019
LOCATION: Aeronautics Building
2700 Port Lansing Road, Lansing, MI 48906

STATE TRANSPORTATION COMMISSION MEETING

TIME/ROOM: 10:00 a.m., Aeronautics Auditorium

I. WELCOME

- Michigan Department of Transportation Director's Report – Director Paul Ajegba

II. COMMISSION BUSINESS

- Minutes of April 18, 2019, Commission Meeting (**motion required**)
- Office of Commission Audits Update – Jack Cotter (no motion required)

III. OVERSIGHT

- Exhibit A: Contract Agreements – Patrick McCarthy (**motion required**)
- Exhibit A-1: Bid Letting Pre-Approvals – Patrick McCarthy (**motion required**)
- Exhibit A-3: Information for the Commission – Patrick McCarthy (no motion required)
- Exhibit B: Construction Contracts – Jason Gutting (no motion required)

IV. INFORMATIONAL REPORTS

- Director's Agenda, June 20, 2019 – Patrick McCarthy (no motion required)
- State Administrative Board Agenda, June 25, 2019 – Patrick McCarthy (no motion required)

V. PRESENTATIONS

- TAMC 2018 Annual Roads and Bridges Report – Joanna Johnson, TAMC Chair
- Five-Year Transportation Program – Lina Chapman (**motion required**)
- Michigan Mobility 2045 (State Long-Range Transportation Plan) Vision – Bradley Sharlow, Project Manager (**motion required**)

VI. PUBLIC COMMENTS

VII. ADJOURNMENT

VIII. NEXT MEETING

- The next full meeting will be held Thursday, October 17, 2019, in Royal Oak, MI.

Accommodations can be made for persons with disabilities and Limited English Proficiency. Large print materials, auxiliary aides or the services of interpreters, signers, or readers are available upon request. Please call 517-335-4381 to request at least seven days before the meeting date.

The Commission may, at its discretion, revise this agenda or take up any other issues as need and as time allows. If you have any questions regarding this meeting, or need special accommodations to attend this meeting, please notify the State Transportation Commission Office at 517-373-2110.

Meeting materials and minutes can be found on our website at www.michigan.gov/transcommission.

MICHIGAN STATE TRANSPORTATION COMMISSION

PUBLIC MEETING

April 18, 2019

Aeronautics Administration Building, Lansing, Michigan

MEETING MINUTES

Members Present: Todd A. Wyett, STC Chair
Michael D. Hayes, STC Vice Chair
George K. Heartwell, STC Commissioner
Charles F. Moser, STC Commissioner
Chris J. Yatooma, STC Commissioner

Members Absent: Helen Zeerip, STC Commissioner

Also Present: Director Ajegba, Michigan Department of Transportation
ReChelle Benson, Director Assistant Analyst, MDOT
Michael Dittenber, Attorney General Office, Transportation Division
Troy Hagon, Commission Advisor
Carol Rademacher, MDOT Contract Services Division
Brad Wieferich, Director, MDOT Bureau of Development
Jason Gutting, Engineer, MDOT Construction Field Services Division
Kim Avery, MDOT Metro Region Engineer
Jack Cotter, Commission Auditor, Office of Commission Audits
ShuKeyna Thurman, Executive Assistant, Office of Commission Audits
About 15-20 people were in the audience.

I. WELCOME

Chair Wyett called the meeting to order at 10:00 a.m.

- ***Director's Report***

In his first report at the April 18 State Transportation Committee (STC) meeting in Royal Oak, Director Paul C. Ajegba presented his four-point vision for MDOT that focuses on innovation, transparency, efficiency, and strengthening our partnerships. Ajegba said that if we ask the public for more money then we must continue to be innovative with our projects, pointing to the I-75 modernization project, the US-131 movable barrier, and the US-23 Flex Route. As part of Gov. Gretchen Whitmer's initiative, Ajegba called on being more transparent with projects to help educate the public, providing an example of the I-94 project in Jackson County that has a website with pictures, charts, and other information. The director discussed the Pleasant Valley Road bridge over I-96, the University Drive diverging diamond interchange (DDI) in Metro Region, and the Cascade Road DDI in Grand Region as examples of efficiency. He called on strengthening partnerships with groups like AASHTO, the Legislature, contractors, consultants, and motorists. Wrapping up his report, the director presented the governor's "Road to Opportunity" [plan](#) for raising revenue to repair the roads. Chair Todd Wyett praised the presentation by saying, "Thank you for an outstanding director's report."

- ***Metro Region Engineer Introduction – Kim Avery***

Chair Wyett introduced Ms. Avery as the new Metro Region Engineer. Ms. Avery thanked everyone for the invitation and stated that she was happy to be back in the Metro Region.

II. **COMMISSION BUSINESS**

- ***Minutes of January 17, 2019, Commission Meeting (motion required)***

Chair Wyett requested a motion regarding approval of the minutes for the last State Transportation Commission meeting. Pending a change to the second page to edit Commissioner Hayes name in the report, Commissioner Hayes made a motion to approve and Commissioner Moser supported. Chair Wyett led a voice vote; all members present voted in favor; **motion to approve carried.**

- ***Office of Commission Audits (OCA) Update – Jack Cotter***

Mr. Cotter gave a brief update on a few things of the external audit area. Mr. Cotter explained that OCA is not an approval entity for MDOT. OCA advises on things such as, accepting cost proposals or not, whether contracts should have added provisions to protect MDOT, processes/procedures at MDOT.

Mr. Cotter mentioned that a big challenge MDOT is facing is knowledge management. It's an aging workforce with a lot of information in a lot of very smart individuals' brains; who are going to eventually depart from MDOT. OCA is working on a process to try and keep that information within MDOT. Mr. Cotter has met with a knowledge guru of MDOT and he's going to test out a system to help map out a process to document processes, procedures, and the controls of how things are done to help not reinvent the wheel.

No motion required.

III. **OVERSIGHT**

- ***Exhibit A: Contract Agreements – Carol Rademacher***

Ms. Rademacher presented information on 25 agreements. Pending any questions, Ms. Rademacher asked for approval of Exhibit A.

Chair Wyett requested a motion regarding approval of Exhibit A. Commissioner Moser made a motion to approve and Commissioner Hayes supported. Chair Wyett led a voice vote; all members present voted in favor; **motion to approve carried.**

- ***Exhibit A-1: Bid Letting Pre-Approvals – Carol Rademacher***

Ms. Rademacher presented information about Letting Statistics and Exhibit A-1. Exhibit A-1 listed 28 constructions projects all over \$500,000. Pending any questions, Ms. Rademacher asked for approval of Exhibit A-1.

Chair Wyett requested a motion regarding approval of Exhibit A-1. Commissioner Heartwell made a motion to approve and Commissioner Moser supported. Chair Wyett led a voice vote; all members present voted in favor; **motion to approve carried.**

- ***Exhibit A-2: Letting Exceptions – Brad Wieferich***

Mr. Wieferich provided information on two projects that were over the engineer's estimate or had only one bidder. Justification memos were provided also for these projects where/as the low bid exceeded the engineer's estimate by more than ten percent; the Office of Commission Audits has reviewed. Pending any questions, Mr. Wieferich asked for approval of Exhibit A-2.

Chair Wyett requested a motion regarding approval of Exhibit A-2. Commissioner Heartwell made a motion to approve and Commissioner Moser supported. Chair Wyett led a voice vote; all members present voted in favor; **motion to approve carried.**

- ***Exhibit A-3: Information for the Commission – Carol Rademacher***

Ms. Rademacher provided information on two projects in which the bid was under five hundred thousand dollars (\$500,000) and has less than two bidders, or has a low bid rejection, or has other bid issues. The contracts for these projects will, at the Director's discretion, be processed and awarded to the low bidder.

No motion required.

- ***Exhibit B: Construction Contracts – Jason Gutting***

Mr. Gutting presented information about Exhibit B, which included cost comparison information about contracts that were recently finalized.

- MDOT Projects for January, February, and March
 - 110 projects totaling approximately \$468 million were finalized.
 - 7 projects were more than 10 percent over the original contract amount
 - 78 projects came in under original contract amount
- Final monthly contract costs were respectively -0.30, -0.81, and -2.06 when compared to their original contract amount.
- Fiscal year to date is averaging -0.31 percent under original contract amount.
- Local Agency Projects for January, February, and March
 - 119 projects totaling approximately \$104 million were finalized.
 - 11 projects were more than 10 percent over the original contract amount
 - 66 projects came in under original contract amount

No motion required.

- ***Exhibit C: Six-month Financial Audit Follow-up Report – Jack Cotter***

Mr. Cotter reported that there was one unresolved contract where more than 120 days have passed. Pending any questions, Mr. Cotter asked for approval of exhibit C.

Chair Wyett requested a motion regarding approval of Exhibit C. Commissioner Hayes made a motion to approve and Commissioner Heartwell supported. Chair Wyett led a voice vote; all members present voted in favor; **motion to approve carried.**

IV. **INFORMATIONAL REPORTS**

- *Director's Agenda, March 28, 2019 – Carol Rademacher*
- *State Administrative Board Agenda, April 9, 2019 – Carol Rademacher*

The Director's Agenda covers memos of understanding with no dollar amounts, revenue agreements, and small dollar amount agreements. The State Administrative Board (SAB) Agenda covers service contracts in excess of \$250,000 and construction contracts in excess of \$500,000. Some items on the SAB agenda, primarily in the area of construction contracts, have previously been submitted to and approved by STC. These two documents are included in the meeting packet, which is posted on the Commission website, in order to inform the public about all types of MDOT bidding activity. **No motion required.**

V. **PUBLIC COMMENT**

City of Royal Oak Commissioner Pat Paruch greeted and welcomed everyone to the City of Royal Oak. Ms. Paruch informed every one of the current construction taking place within Royal Oak, including the building of the new city hall and police station behind the current city hall, in which the STC meeting was being held. Ms. Paruch explained that the current city hall will be demolished and turned into a public park in the middle of downtown.

Ms. Paruch explained that the Royal Oak Commission deals with similar types of issues, as the STC, regarding fiscal issues and funding issues.

Commissioner Heartwell praised the City of Royal Oak and stated that whenever he's in town he's always impressed with all the work that's been done over the last 10-20 years with the city.

VI. **ADJOURNMENT**

With no further business being before the Commission, Chair Wyett declared the meeting adjourned at 10:52 a.m.

VII. **NEXT MEETING**

The next full meeting will be held Thursday, July 18, 2019, Lansing, MI.

Troy Hagon
Commission Advisor

DATE: July 18, 2019

TO: State Transportation Commission

FROM: Jack Cotter, CPA, CGMA
Commission Auditor
Office of Commission Audits

SUBJECT: State Transportation Commission Agenda – Exhibit A
July 18, 2019

As information requested by the Commission, the Office of Commission Audits (OCA) notes that Exhibit A does not include entities that have owed the department funds exceeding \$20,000 for more than 120 days.

Also, Guidance Document 10044, *MDOT Requests for OCA Attestation Engagements and Procedures Regarding the Processing of Independent Certified Public Accountant's Review Reports*, requires the department to process OCA independent certified public accountant's review reports within 120 days of issuance. As of July 9, 2019, Exhibit A does not include any entities for which review reports were not processed within the required timeline.

Jack Cotter, CPA, CGMA
Commission Auditor

Attachment

cc: T. Hagon

REQUEST FOR MICHIGAN STATE TRANSPORTATION COMMISSION APPROVAL

CONTRACTS

July 18, 2019

The following contracts are being submitted for approval. The appropriate documents will be approved by the Attorney General and comply with all legal and fiscal requirements prior to award.

CONTRACTS

1. HIGHWAYS - Participation for Local Agency Construction Contract
Contract (2019-5306) between MDOT and the Monroe County Road Commission will provide for participation in the following improvements:

Ground-mounted flashing beacon installation work along Samaria Road at Douglas Road, along Samaria Road at Jackman Road, and along Whiteford Road at Smith Road, including signing upgrade, drainage improvement, and clearing work.

Estimated Funds:

Federal Highway Administration Funds	\$59,008.85
Monroe County Road Commission Funds	<u>\$ 6,556.54</u>
Total Funds	<u>\$65,565.39</u>

HSIP 58000 – 203419
Local Force Account

2. HIGHWAYS - Participation for State Local Bridge Construction Contract
Contract (2019-5313) between MDOT and the Barry County Road Commission will provide for funding participation in the construction of the following improvements under Section 144 of Title 23 USC and the State Local Bridge Program:

PART A

Rehabilitation work for structure 567, which carries River Road over the Thornapple River, Sections 22 & 27, T03N, R08W, and rehabilitation work for structure 569, which carries Center Road over Thornapple River, Sections 16 & 21, T03N, R08W, Hastings Township, Barry County, Michigan, including substructure repair, deck joint replacement, hot mix asphalt wearing course replacement, deck waterproofing membrane, beam repair, fascia beam concrete surface coating, approach, and maintaining traffic work.

PART B

The removal and replacement of structure 550, which carries Thornapple Lake Road over the Thornapple River, Section 28, T03N, R07W, Castleton Township, Barry County, Michigan, including hot mix asphalt wearing course replacement, deck waterproofing membrane, beam repair, fascia beam concrete surface coating, approach, and maintaining traffic work.

* Denotes a non-standard contract/amendment

PART C

The removal and replacement of structure 565, which carries Barger Road over the Thornapple River, Section 20, T03N, R08W, Castleton Township, Barry County, Michigan, including hot mix asphalt wearing course replacement, deck waterproofing membrane, beam repair, fascia beam concrete surface coating, approach, and maintaining traffic work.

Estimated Funds:

	<u>PART A</u>	<u>PART B</u>	<u>PART C</u>	<u>TOTAL</u>
Federal Highway Administration Funds	\$ 0	\$59,000	\$ 0	\$ 59,000
State Restricted Trunkline Funds	\$304,200	\$11,100	\$53,600	\$368,900
Barry County Road Commission Funds	\$ 16,000	\$ 3,600	\$ 2,800	\$ 22,400
Total Funds	<u>\$320,200</u>	<u>\$73,700</u>	<u>\$56,400</u>	<u>\$450,300</u>

MCS 08000 – 202427,202428; HIP 08000 – 133074
Letting of 7/12/2019

3. HIGHWAYS - Participation for Local Agency Construction Contract

Contract (2019-5330) between MDOT and the County of Jackson will provide for participation in the following improvements:

Single course chip seal work along Rives Junction Road from Springport Road northerly to Highway M-50 and along Rives Junction Road from the southern township limits of Rives northerly for approximately 5,935 feet, including pavement marking and traffic control work.

Estimated Funds:

Federal Highway Administration Funds	\$75,199.99
County of Jackson Funds	<u>\$18,800.00</u>
Total Funds	<u>\$93,999.99</u>

STL 38000 – 206608
Local Force Account

4. HIGHWAYS - Participation for Local Agency Construction Contract

Contract (2019-5338) between MDOT and the County of Jackson will provide for participation in the following improvements:

Single course chip seal and fog seal work along Meridian Road from Highway M-106 northerly to south of Barry Road and along Bunkerhill Road from Highway M-106 northerly to the Jackson/Ingham county line, including pavement marking and traffic control work, together with necessary related work.

Estimated Funds:

Federal Highway Administration Funds	\$75,199.99
County of Jackson Funds	<u>\$18,800.00</u>
Total Funds	<u>\$93,999.99</u>

STL 38000 – 206606
Local Force Account

5. HIGHWAYS - Participation for Local Agency Construction Contract
Contract (2019-5339) between MDOT and the County of Jackson will provide for participation in the following improvements:

Single course chip seal and fog seal work along Onondaga Road from Highway M-50 to the Jackson/Ingham county line and along Woodard Road from Highway M-50 to Maple Lane Road, including pavement marking and traffic control work

Estimated Funds:

Federal Highway Administration Funds	\$75,199.99
County of Jackson Funds	<u>\$18,800.00</u>
Total Funds	<u>\$93,999.99</u>

 STL 38000 – 206607
 Local Force Account

6. HIGHWAYS - Participation for Local Agency Construction Contract
Contract (2019-5364) between MDOT and the Village of Marcellus will provide for funding participation in the construction of the following improvements utilizing State Transportation Economic Development (TED) Category B Funds:

Hot mix asphalt resurfacing work along East Dibble Street from Centre Street, and seal coat work, together with necessary related work, at the following locations: Maple Road from Main Street northerly to the Village of Marcellus limits, Read Street from Maple Road to Jones Street, Woodland Street from Worden Street to Centre Street, Worden Street from Main Street to South Street, Jones Street from Main Street to Read Street, Centre Street from Main Street to Read Street, and Burney Street from Main Street to Read Street.

Estimated Funds:

State Restricted TED Funds	\$46,272
Village of Marcellus Funds	<u>\$46,272</u>
Total Funds	<u>\$92,544</u>

 EDB 14000 – 208336; Cass County
 Local Letting

7. HIGHWAYS - Participation for Local Agency Construction Contract
Contract (2019-5374) between MDOT and the Village of Baraga will provide for funding participation in the construction of the following improvements utilizing State Transportation Economic Development (TED) Category B Funds:

Concrete box culvert installation work along Hemlock Street including approach work.

Estimated Funds:

State Restricted TED Funds	\$110,000
Village of Baraga Funds	<u>\$110,000</u>
Total Funds	<u>\$220,000</u>

 EDB 07000 – 208326; Baraga County
 Local Letting

* Denotes a non-standard contract/amendment

8. HIGHWAYS - Participation for Local Agency Construction Contract
Contract (2019-5375) between MDOT and the Village of Hersey will provide for funding participation in the construction of the following improvements utilizing State Transportation Economic Development (TED) Category B Funds:

Hot mix asphalt resurfacing work along Main Street from 3 Mile Road to 2 Mile Road, along Fourth Street from Elm Street to approximately 760 feet east of Hemlock Street, along Second Street from Main Street to Division Street, along Division Street from Second Street to approximately 200 feet north of Third Street, tying in to Second Street, and along Mill Site Road from Main Street to River Road.

Estimated Funds:

State Restricted TED Funds	\$36,500
Village of Hersey Funds	<u>\$36,500</u>
Total Funds	<u>\$73,000</u>

EDB 67000 – 208342; Osceola County
Local Letting

9. HIGHWAYS - Participation for Local Agency Construction Contract
Contract (2019-5376) between MDOT and the City of Olivet will provide for funding participation in the construction of the following improvements utilizing State Transportation Economic Development (TED) Category B Funds:

Hot mix asphalt cold milling and resurfacing work along Washington Street from approximately 500 feet west of Main Street to the city limits of Olivet, including pavement marking work. Hot mix asphalt base crushing, shaping, and resurfacing work along Cottage Street from Spruce Street to the east city limits of Olivet and along Butterfield Highway from Main Street to Harris Road.

Estimated Funds:

State Restricted TED Funds	\$147,645
City of Olivet Funds	<u>\$147,645</u>
Total Funds	<u>\$295,290</u>

EDB 23000 – 208361; Eaton County
Local Letting

10. HIGHWAYS - Participation for Local Agency Construction Contract
Contract (2019-5379) between MDOT and the Village of Thompsonville will provide for funding participation in the construction of the following improvements utilizing State Transportation Economic Development (TED) Category B Funds:

Hot mix asphalt resurfacing work along Third Street from Lincoln Avenue northerly to Gallagher Road and crack sealing work along Michigan Avenue from Gallagher Road southerly to County Line Street.

Estimated Funds:

State Restricted TED Funds	\$30,000
Village of Thompsonville Funds	<u>\$30,000</u>
Total Funds	<u>\$60,000</u>

EDB 10000 – 208371; Benzie County
Local Letting

11. HIGHWAYS - Participation for Local Agency Construction Contract
Contract (2019-5382) between MDOT and the Village of Kaleva will provide for funding participation in the construction of the following improvements utilizing State Transportation Economic Development (TED) Category B Funds:

Roadway reconstruction work along Osmo Street from 9 Mile Road southerly to Kangas Road, including pavement removal, aggregate base removal, sand subbase grading, drainage improvement, aggregate base, and hot mix asphalt surfacing work.

Estimated Funds:

State Restricted TED Funds	\$125,000
Village of Kaleva Funds	<u>\$125,000</u>
Total Funds	<u>\$250,000</u>

EDB 51000 – 208368; Manistee County
Local Letting

12. HIGHWAYS - Participation for Local Agency Construction Contract
Contract (2019-5385) between MDOT and the Village of Mancelona will provide for funding participation in the construction of the following improvements utilizing State Transportation Economic Development (TED) Category B Funds:

Hot mix asphalt resurfacing and wedging work along East Main Street/Howard Street from East Limits Street to South Maple Avenue, including aggregate shoulder, restoration, and approach work.

Estimated Funds:

State Restricted TED Funds	\$ 52,500
Village of Mancelona Funds	<u>\$ 52,500</u>
Total Funds	<u>\$105,000</u>

EDB 05000 – 208289; Antrim County
Local Letting

13. HIGHWAYS - Participation for Local Agency Construction Contract
Contract (2019-5391) between MDOT and the City of St. Louis will provide for funding participation in the construction of the following improvements utilizing State Transportation Economic Development (TED) Category B Funds:

Roadway reconstruction work along Maple Street from West State Street to Hazel Street, including subbase, base, storm sewer and structure, concrete curb and gutter, and hot mix asphalt resurfacing work.

Estimated Funds:

State Restricted TED Funds	\$250,000
City of St. Louis Funds	<u>\$470,000</u>
Total Funds	<u>\$720,000</u>

EDB 29000 – 208344; Gratiot County
Local Letting

14. HIGHWAYS - Participation for Local Agency Construction Contract

Contract (2019-5392) between MDOT and the City of Ecorse will provide for funding participation in the construction of the following improvements utilizing State Transportation Economic Development (TED) Category B Funds:

Hot mix asphalt cold milling and resurfacing work along West Alexis Street from High Street to Jefferson Avenue, along 10th Street from Southfield Road to Labadie Street, along 10th Street from Salliotte Street to Hyacinth Street, and along 13th Street from Salliotte Street to Hyacinth Street, including concrete base, concrete curb and gutter, and drainage improvement work at selected locations.

Estimated Funds:

State Restricted TED Funds	\$250,000
City of Ecorse Funds	<u>\$433,690</u>
Total Funds	<u>\$683,690</u>

EDB 29000 – 208387; Wayne County
Local Letting

15. PASSENGER TRANSPORTATION - Section 5307 Program

Project Authorization (4) Revision (6) under Master Agreement (2012-0073) between MDOT and the Detroit Transportation Corporation (DTC) will extend the authorization term by two years to provide sufficient time for DTC to complete the station lighting improvement project. The project was delayed because of DTC procurement staff vacancies. The original authorization provides state matching funds under the DTC's FY 2013 and FY 2014 Federal Section 5307 Urbanized Area Formula Capital Program grant for infrastructure and equipment upgrades to the People Mover. The revised authorization term will be from August 30, 2013, through August 29, 2021. The authorization amount remains unchanged at \$1,531,209. The term of the master agreement is from October 1, 2011, until the last obligation between the parties has been fulfilled. The master agreement includes authorizations for program years FY 2012 through FY 2016. Source of Funds: Federal Transit Administration Funds - \$1,224,967; FY 2013, FY 2014, and FY 2015 State Restricted Comprehensive Transportation Funds - \$306,242.

16. PASSENGER TRANSPORTATION - Section 5337 Program

Project Authorization (5) Revision (3) under Master Agreement (2012-0073) between MDOT and the Detroit Transportation Corporation (DTC) will extend the authorization term by two years to provide sufficient time for the DTC to complete the software procurement and security camera projects. The projects were delayed due to vacancies on the DTC's procurement staff. The original authorization provides state matching funds for the FY 2013 Federal Section 5337 State of Good Repair Program for the rehabilitation/renovation of the People Mover and security equipment. The revised authorization term will be August 30, 2013, through August 29, 2021. The authorization amount remains unchanged at \$3,942,730. The term of the master agreement is from October 1, 2011, until the last obligation between the parties has been fulfilled. The master agreement includes authorizations for program years FY 2012 through FY 2016. Source of Funds: Federal Transit Administration Funds - \$3,154,184; FY 2013, FY 2014, and FY 2015 State Restricted Comprehensive Transportation Funds - \$788,546.

* Denotes a non-standard contract/amendment

17.-19. PASSENGER TRANSPORTATION - 100% State Service Initiatives

The following project authorizations issued under master agreements between MDOT and the following agencies will provide 100 percent State Service Initiatives funds for demonstration of safety technology for passenger transportation projects. The authorizations will be in effect from the date of award through three years. The total amount of the authorizations will be \$1,095,505. The terms of the master agreements are from October 1, 2016, until the last obligations between the parties have been fulfilled. The master agreements include authorizations for program years FY 2017 through FY 2021. Source of Funds: FY 2019 State Restricted Comprehensive Transportation Funds - \$1,095,505.

	<u>Agreement/ Authorization</u>	<u>Agency</u>	<u>Total</u>
17.	2017-0008/12	Ann Arbor Area Transportation Authority	\$350,000
18.	2017-0015/9	Battle Creek, City of	\$395,505
19.	2017-0119/6	Regional Transit Authority of Southeast Michigan	\$350,000

20. PASSENGER TRANSPORTATION - Section 5311 Capital/STP

Project Authorization (2) Revision (1) under Master Agreement (2017-0009) between MDOT and the Antrim County Board of Commissioners will add line items for an expansion van and computer equipment and will adjust the funding between the line items. There was cost savings on the expansion bus, and the County has determined that an expansion van and computer equipment are a higher priority than the originally planned facility repairs. The original authorization provides state matching funds for the County's FY 2017 Federal Section 5311 Capital Program and Surface Transportation Program grant for an expansion bus and facility repairs. The authorization term remains unchanged, September 22, 2017, through September 21, 2020. The authorization amount remains unchanged at \$142,500. The term of the master agreement is from October 1, 2016, until the last obligation between the parties has been fulfilled. The master agreement includes authorizations for program years FY 2017 through FY 2021. Source of Funds: Federal Transit Administration Funds - \$114,000; FY 2017 State Restricted Comprehensive Transportation Funds - \$28,500.

21. PASSENGER TRANSPORTATION - Section 5303 Program

Project Authorization (7) under Master Agreement (2017-0023) between MDOT and the Blue Water Area Transportation Commission will provide state matching funds for the FY 2019 Federal Section 5303 State and Non-Metropolitan Planning and Research Program grant for planning activities. The authorization will be in effect from the effective date of the federal grant through three years. The authorization may be retroactive due to the effective date matching the federal grant effective date. The authorization amount will be \$1,000,000. The term of the master agreement is from October 1, 2016, until the last obligation between the parties has been fulfilled. The master agreement includes authorizations for program years FY 2017 through FY 2021. Source of Funds: Federal Transit Administration Funds - \$497,039; FY 2019 State Restricted Comprehensive Transportation Funds - \$502,961.

22. PASSENGER TRANSPORTATION - Section 5307 and Section 5339 Programs

Project Authorization (8) under Master Agreement (2017-0023) between MDOT and the Blue Water Area Transportation Commission will provide state matching funds for the FY 2019 Federal Section 5307 Transit Formula Grants Program and the FY 2019 Federal Section 5339 Bus and Bus Facilities Formula Program grant for miscellaneous support equipment, rehabilitation/renovation of the administrative/maintenance facility, and job access and reverse commute operating assistance. The authorization will be in effect from June 7, 2019, through June 6, 2023. The authorization amount will be \$878,074. The term of the master agreement is from October 1, 2016, until the last obligation between the parties has been fulfilled. The master agreement includes authorizations for program years FY 2017 through FY 2021. Source of Funds: Federal Transit Administration Funds - \$519,768; FY 2019 State Restricted Comprehensive Transportation Funds - \$358,306.

23. PASSENGER TRANSPORTATION - Section 5307 Program
Project Authorization (9) under Master Agreement (2017-0023) between MDOT and the Blue Water Area Transportation Commission will provide state matching funds for the FY 2019 Federal Section 5307 Federal Transit Formula Grants Program and Congestion Mitigation and Air Quality Improvement Program grant for replacement vehicles. The authorization will be in effect from the effective date of the federal grant through four years. The authorization may be retroactive due to the effective date matching the federal grant effective date. The authorization amount will be \$3,327,928. The term of the master agreement is from October 1, 2016, until the last obligation between the parties has been fulfilled. The master agreement includes authorizations for program years FY 2017 through FY 2021. Source of Funds: Federal Transit Administration Funds - \$2,662,344; FY 2019 State Restricted Comprehensive Transportation Funds - \$665,584.
24. PASSENGER TRANSPORTATION - Intercity Capital
Project Authorization (2) Revision (1) under Master Agreement (2017-0058) between MDOT and Greyhound Lines, Inc., will provide an additional \$650,000 in funds for the purchase of additional motor coaches. The original authorization provides state matching funds for the FY 2018 Section 5311(f) Intercity Capital Program grant for the purchase of motor coaches for use in Michigan's intercity bus program. The authorization term remains unchanged, July 10, 2018, through July 9, 2020. The revised authorization amount will be \$2,350,000. The term of the master agreement is from October 1, 2016, until the last obligation between the parties has been fulfilled. The master agreement includes authorizations for program years FY 2017 through FY 2021. Source of Funds: Federal Transit Administration Funds - \$1,880,000; FY 2018 and FY 2019 State Restricted Comprehensive Transportation Funds - \$470,000.
25. PASSENGER TRANSPORTATION - Section 5307 and Section 5339 Programs
Project Authorization (5) under Master Agreement (2017-0061) between MDOT and the Harbor Transit Multi-Modal Transportation System will provide state matching funds for the FY 2019 Federal Section 5307 Transit Formula Grants Program and Congestion Mitigation and Air Quality Improvement Program and FY 2019 Federal Section 5339 Bus and Bus Facilities Formula Program grant for the purchase of replacement and expansion vehicles, hoist, and security equipment and for marketing and outreach. The authorization will be in effect from the effective date of the federal grant through four years. The authorization may be retroactive due to the effective date matching the federal grant effective date. The authorization amount will be \$731,973. The term of the master agreement is from October 1, 2016, until the last obligation between the parties has been fulfilled. The master agreement includes authorizations for program years FY 2017 through FY 2021. Source of Funds: Federal Transit Administration - \$585,578; FY 2019 State Restricted Comprehensive Transportation Funds - \$146,395.
26. PASSENGER TRANSPORTATION – Section 5311(f) Capital Program
Project Authorization (1) Revision (2) under Master Agreement (2017-0068) between MDOT and Indian Trails, Inc., will provide an additional \$1,750,000 in federal funds and state matching funds for the purchase of additional motor coaches. The original authorization provides state matching funds for the FY 2017 Section 5311(f) Intercity Bus Program grant for the purchase of motor coaches for the intercity bus program. The authorization term remains unchanged, September 12, 2017, through September 11, 2021. The revised authorization amount will be \$4,900,000. The term of the master agreement is from October 1, 2016, until the last obligation between the parties has been fulfilled. The master agreement includes authorizations for program years FY 2017 through FY 2021. Source of Funds: Federal Transit Administration Funds - \$3,920,000; FY 2017, FY 2018, and FY 2019 State Restricted Comprehensive Transportation Funds - \$637,900; Private Funds - \$342,100.

27. PASSENGER TRANSPORTATION - Section 5307 Program
Project Authorization (12) under Master Agreement (2017-0070) between MDOT and the Interurban Transit Partnership will provide state matching funds for the FY 2019 Federal Section 5307 Urbanized Area Formula Capital Program and Congestion Mitigation and Air Quality Improvement Program grant for the purchase of compressed natural gas replacement buses, replacement paratransit buses, and clean air action days. The authorization will be in effect from the effective date of the federal grant through four years. The authorization may be retroactive due to the effective date matching the federal grant effective date. The authorization amount will be \$1,257,575. The term of the master agreement is from October 1, 2016, until the last obligation between the parties has been fulfilled. The master agreement includes authorizations for program years FY 2017 through FY 2021. Source of Funds: Federal Transit Administration Funds - \$1,037,575; FY 2019 State Restricted Comprehensive Transportation Funds - \$220,000.
28. PASSENGER TRANSPORTATION - Section 5307 and Section 5339 Program
Project Authorization (13) under Master Agreement (2017-0070) between MDOT and the Interurban Transit Partnership will provide state matching funds for the FY 2019 Federal Section 5307 Transit Formula Grants Program and FY 2019 Federal Section 5339 Bus and Bus Facilities Formula Program grant for replacement vehicles, service vehicles, associated capital maintenance items, bus tire lease, surveillance/security equipment, office furniture and equipment, architectural and engineering, shop equipment, computer hardware and software, rehabilitation/renovation of administrative/maintenance facility and bus shelters, preventive maintenance, capital costs of contracting, contingencies, project administration, passenger shelters, transit signal equipment, and planning line items. The authorization will be in effect from the effective date of the federal grant through four years. The authorization may be retroactive due to the effective date matching the federal grant effective date. The authorization amount will be \$13,715,039. The term of the master agreement is from October 1, 2016, until the last obligation between the parties has been fulfilled. The master agreement includes authorizations for program years FY 2017 through FY 2021. Source of Funds: Federal Transit Administration Funds - \$10,972,031; FY 2019 State Restricted Comprehensive Transportation Funds - \$2,743,008.
29. PASSENGER TRANSPORTATION - Section 20005(b) of MAP-21
Project Authorization (14) under Master Agreement (2017-0070) between MDOT and the Interurban Transit Partnership will provide state matching funds for the FY 2019 Pilot Program for Transit-Oriented Development Planning grant authorized under Section 20005(b) of the Moving Ahead for Progress in the 21st Century Act (MAP-21) for transit-oriented development planning for the Laker Line. The authorization will be in effect from the effective date of the federal grant through four years. The authorization may be retroactive due to the effective date matching the federal grant effective date. The authorization amount will be \$870,000. The term of the master agreement is from October 1, 2016, until the last obligation between the parties has been fulfilled. The master agreement includes authorizations for program years FY 2017 through FY 2021. Source of Funds: Federal Transit Administration Funds - \$696,000; FY 2019 State Restricted Comprehensive Transportation Funds - \$174,000.

30. PASSENGER TRANSPORTATION - Section 5307 Program
Project Authorization (12) under Master Agreement (2017-0082) between MDOT and the Livingston County Board of Commissioners will provide state matching funds for the FY 2019 Federal Section 5307 Urbanized Area Formula Capital Program, Surface Transportation Program, and Congestion Mitigation and Air Quality Improvement Program grants for the purchase of replacement and expansion vans. The authorization will be in effect from the effective date of the federal grant through four years. The authorization may be retroactive due to the effective date matching the federal grant effective date. The authorization amount will be \$374,528. The term of the master agreement is from October 1, 2016, until the last obligation between the parties has been fulfilled. The master agreement includes authorizations for program years FY 2017 through FY 2021. Source of Funds: Federal Transit Administration Funds - \$299,622; FY 2019 State Restricted Comprehensive Transportation Funds - \$74,906.
31. PASSENGER TRANSPORTATION - Section 5307 and Section 5339 Programs
Project Authorization (8) under Master Agreement (2017-0084) between MDOT and the Macatawa Area Express Transportation Authority will provide state matching funds for the FY 2019 Federal Section 5307 Transit Formula Grants Program and FY 2019 Federal Section 5339 Bus and Bus Facilities Formula Program grant for the purchase of replacement buses and communication equipment. The authorization will be in effect from the effective date of the federal grant through four years. The authorization may be retroactive due to the effective date matching the federal grant effective date. The authorization amount will be \$314,295. The term of the master agreement is from October 1, 2016, until the last obligation between the parties has been fulfilled. The master agreement includes authorizations for program years FY 2017 through FY 2021. Source of Funds: Federal Transit Administration Funds - \$251,436; FY 2019 State Restricted Comprehensive Transportation Funds - \$62,859.
32. PASSENGER TRANSPORTATION - Sections 5307/5339 and CMAQ Programs
Project Authorization (20) under Master Agreement (2017-0092) between MDOT and the Mass Transportation Authority will provide state matching funds under the FY 2019 Federal Section 5307 Transit Formula Grants Program, FY 2019 Congestion Mitigation and Air Quality Improvement Program, and FY 2019 Section 5339 Bus and Bus Facilities Formula Program grant for capital maintenance parts, shop equipment, expansion vehicles, rehabilitate/rebuilding used vehicles, automatic data processing hardware and software, support vehicles, bus shelters and pads, preventive maintenance, mobile surveillance/security equipment, rehabilitation/renovation of facilities, and the provision of job access and reverse commute operating assistance. The authorization will be in effect from the effective date of the federal grant through four years. The authorization may be retroactive due to the effective date matching the federal grant effective date. The authorization amount will be \$10,522,339. The term of the master agreement is from October 1, 2016, until the last obligation between the parties has been fulfilled. The master agreement includes authorizations for program years FY 2017 through FY 2021. Source of Funds: Federal Transit Administration Funds - \$8,237,870; FY 2019 State Restricted Comprehensive Transportation Funds - \$2,284,469.
33. PASSENGER TRANSPORTATION - Section 5310 Program
Project Authorization (21) under Master Agreement (2017-0092) between MDOT and the Mass Transportation Authority will provide state matching funds for the FY 2019 Federal Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program grant for the purchase of expansion vehicles. The authorization will be in effect from the effective date of the federal grant through four years. The authorization may be retroactive due to the effective date matching the federal grant effective date. The authorization amount will be \$260,931. The term of the master agreement is from October 1, 2016, until the last obligation between the parties has been fulfilled. The master agreement includes authorizations for program years FY 2017 through FY 2021. Source of Funds: Federal Transit Administration Funds - \$208,745; FY 2019 State Restricted Comprehensive Transportation Funds - \$52,186.

34. PASSENGER TRANSPORTATION – Job Access and Reverse Commute Program
Project Authorization (13) Under Master Agreement (2017-0094) between MDOT and the Mecosta Osceola Transit Authority will provide 100 percent state funding for the Job Access and Reverse Commute Program to transport welfare recipients and eligible low-income individuals to and from jobs and activities related to their employment. The authorization will be in effect from April 1, 2019, through September 30, 2019. The authorization amount will be \$64,584. The term of the master agreement is from October 1, 2016, until the last obligation between the parties has been fulfilled. The master agreement includes authorizations for program years FY 2017 through FY 2021. Source of Funds: FY 2019 State Restricted Comprehensive Transportation Funds - \$64,584.
35. PASSENGER TRANSPORTATION - Section 5310 Program
Project Authorization (2) under Master Agreement (2017-0119) between MDOT and the Regional Transit Authority of Southeast Michigan (RTA) will provide state matching funds for the FY 2017 Federal Section 5310 Elderly and Persons with Disabilities Program grant for ongoing operations and expansion of the existing regional mobility management program operated by the Area Agency on Aging 1B under the MyRide2 program. The authorization will be in effect from September 22, 2017, through September 21, 2020. The authorization will be retroactive due to the effective date matching the matching the federal grant effective date. The authorization amount will be \$337,497. The term of the master agreement is from October 1, 2016, until the last obligation between the parties has been fulfilled. The master agreement includes authorizations for program years FY 2017 through FY 2021. Source of Funds: Federal Transit Administration Funds - \$269,998; FY 2019 State Restricted Comprehensive Transportation Funds - \$67,499.
36. PASSENGER TRANSPORTATION - State Capital Program
Project Authorization (5) Revision (1) under Master Agreement (2017-0125) between MDOT and the Schoolcraft County Transit Authority will provide additional state funding in the amount of \$9,931 to assist with the purchase of a van. The additional funds are needed because of unforeseen cost increases by the manufacturer. The original authorization provides state funding for the purchase of a replacement vehicle. The authorization term remains unchanged, August 27, 2018, through August 26, 2021. The revised authorization amount will be \$68,382. The term of the master agreement is from October 1, 2016, until the last obligation between the parties has been fulfilled. The master agreement includes authorizations for program years FY 2017 through FY 2021. Source of Funds: FY 2018 and FY 2019 State Restricted comprehensive Transportation Funds - \$68,382.
37. PASSENGER TRANSPORTATION - Section 5304 Program
Project Authorization (17) under Master Agreement (2017-0130) between MDOT and the Suburban Mobility Authority for Regional Transportation will provide state matching funds for the FY 2019 Federal Section 5304 Statewide and Nonmetropolitan Planning program grant for planning activities. The authorization will be in effect from June 29, 2019, through June 18, 2022. The authorization will be retroactive due to the effective date matching the federal grant effective date. The authorization amount will be \$325,000. The term of the master agreement is from October 1, 2016, until the last obligation between the parties has been fulfilled. The master agreement includes authorizations for program years FY 2017 through FY 2021. Source of Funds: Federal Transit Administration Funds - \$260,000; FY 2019 State Restricted Comprehensive Transportation Funds - \$65,000.

38. *RAIL - Increase Maximum Contract Amount
Amendatory Contract (1992-2352/A12) between MDOT and the Indiana Northeastern Railroad Company (INRC) will increase the maximum contract amount by \$2,050,000 to allow additional property management activities to be performed under the indefinite delivery of service contract. The original contract provides for INRC to perform property management services, including normal and emergency repairs and improvements on the property, as authorized by MDOT, on the state-owned railroad line operated by INRC in Hillsdale and Branch Counties. The contract term remains unchanged, from January 6, 1993, until both of the following have occurred: (1) written notice of the termination of the contract has been provided by INRC by MDOT not less than 60 days before the date of the termination, and (2) a sale or lease is executed, as provided in Section 10(3)(e) of the State Transportation Preservation Act, PA 295 of 1976, as amended by PA 235 of 1998. The revised maximum contract amount will be \$3,500,000. Source of Funds: 100% State Restricted Comprehensive Transportation Funds.
39. RAIL – Construction Services for Bridge Rehabilitations
Project Authorization (20) Revision (1) under Master Agreement (2012-0200) between MDOT and the National Railroad Passenger Corporation (Amtrak) will extend the authorization term by two months to provide sufficient time for the final inspection and final invoicing. The original authorization provides for construction services to be performed on the Michigan Line railroad corridor at bridges over Sandstone Creek, Augusta Creek (4 Mile), and Gull Creek at MP 80.96, MP 130.12, and MP 133.45, respectively. Construction services to be performed consist of full or part width superstructure replacement, moderate substructure repair, installation of safety walkway and railing, and installation of scour control countermeasures. MDOT compensates Amtrak for eligible costs under the approved scope of work and estimate. The revised authorization term will be July 31, 2018, through December 31, 2019. The authorization amount remains unchanged at \$2,593,809. The term of the master agreement is from December 7, 2012, through September 30, 2032. Source of Funds: State Restricted Comprehensive Transportation Funds - \$2,593,809.
40. RAIL – Replacement of Active Warning Devices
Project Authorization (30) under Master Agreement (2012-0200) between MDOT and the National Railroad Passenger Corporation (Amtrak) will provide for the supply and installation of 10 active warning devices at six locations in Wayne, Calhoun, and Kalamazoo Counties. MDOT will compensate Amtrak for eligible costs under the approved scope of work and estimate. The authorization will be in effect from August 1, 2019, through December 31, 2020. The authorization amount will be \$292,264. The term of the master agreement is from December 7, 2012, through September 30, 2032. Source of Funds: State Restricted Comprehensive Transportation Funds - \$292,264.
41. RAIL – Increase Services and Amount
Amendatory Contract (2019-0005/A1) between MDOT and Bergmann Associates, Architects, Engineers, Landscape Architects & Surveyors, D.P.E., will increase the contract amount by \$18,989.80 to include ancillary roadway work related to the required substructure repairs and freeway lighting/median barrier work to provide construction access for the project. The original contract provides for design services to be performed for the repair of the Michigan Line railroad structure over M-39 (Southfield Freeway) on the state-owned accelerated railroad corridor in the City of Dearborn, Wayne County, Michigan. The contract term remains unchanged, December 21, 2018, through December 31, 2019. The revised contract amount will be \$217,051.95. Source of Funds: FY 2019 State Restricted Comprehensive Transportation Funds - \$217,051.95.

42. *RAIL - Railroad Structure Agreement

Agreement (2019-0282) between MDOT and Grand Traverse County (d/b/a Cass Road Drain Drainage District) will set forth the requirements, responsibilities, and cost share for the construction and continued maintenance of the proposed drainage structure under the MDOT railroad right-of-way at railroad mile post 27.71 in Garfield Township, Grand Traverse County, Michigan. The agreement will be in effect from July 18, 2019, until the structure no longer exists. The estimated project cost is \$600,000. MDOT agrees to pay 50% of the estimated project cost, up to a maximum amount of \$300,000. Source of Funds: State Restricted Comprehensive Transportation Funds - \$300,000.

Upon receipt of your approval, the contracts and agreements will be processed for award. Subject to the exercise of the discretion in the processing, I approve the contracts described in this agenda and authorize the award by the responsible management staff of MDOT to the extent authorized by and in accordance with the December 14, 1983, resolution of the State Transportation Commission and the Director's delegation memorandum of February 11, 2019.

Respectfully submitted,

Signed copy on file

Paul C. Ajegba
Director

REQUEST FOR MICHIGAN STATE TRANSPORTATION

COMMISSION APPROVAL

BID LETTING PRE-APPROVAL

July 18, 2019

The following contracts are being submitted for approval.

STATE PROJECT

- | | | |
|----|--|--|
| 1. | Letting of August 9, 2019
Letting Call: 1908 001
Project: IM 33084-130133, ETC
Local Agreement:
Start Date: September 3, 2019
Completion Date: October 30, 2020 | Prequalification Level:
\$6,234,000.00 |
|----|--|--|

Bridge rehabilitation including deep overlay, deck patching, expansion joint replacement, epoxy overlay, healer/sealer, pin and hanger replacement, rocker realignment, partial painting, beam end repair, substructure repair, slope protection repair, approach pavement replacement and pavement marking on 9 bridges along I-96 from Hagadorn Road to Wallace Road, Ingham County. This project includes a 5-year performance warranty on thin epoxy bridge deck overlay and a 2-year warranty on concrete surface coating.

3.00 % DBE participation required

LOCAL PROJECTS

- | | | |
|----|---|--|
| 2. | Letting of August 9, 2019
Letting Call: 1908 003
Project: STUL 63000-203559
Local Agreement: 19-5353
Start Date: 10 days after award
Completion Date: May 19, 2021 | Prequalification Level:
\$3,370,000.00 |
|----|---|--|

0.96 mi of hot mix asphalt surfacing, concrete culvert, curb, gutter, sidewalk and ramps, aggregate base, drainage, signing and pavement marking on Dixboro Road from Eight Mile Road to Nine Mile Road, Oakland County. This is a Local Agency project.

5.00 % DBE participation required

3. Letting of August 9, 2019
Letting Call: 1908 004
Project: HSIP 02000-207845
Local Agreement: 19-5324
Start Date: 10 days after award
Completion Date: August 30, 2020
- Prequalification Level:
\$654,000.00
- 2.63 mi of hot mix asphalt overlay, crown correction, superelevation modification, aggregate shoulders, signing and pavement markings on H-58 from City Limits Road to Miners Castle Road, Alger County. This is a Local Agency project.
- 0.00 % DBE participation required
4. Letting of August 9, 2019
Letting Call: 1908 005
Project: ST 41000-206983
Local Agreement: 19-5327
Start Date: September 3, 2019
Completion Date: October 25, 2019
- Prequalification Level:
\$741,000.00
- 1.92 mi of hot mix asphalt crushing, shaping and resurfacing and pavement markings on 6 Mile Road NW from Fruit Ridge Road to West of Walker Avenue, Kent County. This is a Local Agency project.
- 3.00 % DBE participation required
5. Letting of August 9, 2019
Letting Call: 1908 006
Project: STL 38000-203005
Local Agreement: 19-5342
Start Date: 10 days after award
Completion Date: November 2, 2020
- Prequalification Level:
\$5,955,000.00
- 40.68 mi of hot mix asphalt overlay, aggregate shoulders and pavement markings on various routes, Jackson County. This is a Local Agency project.
- 3.00 % DBE participation required
6. Letting of August 9, 2019
Letting Call: 1908 007
Project: STU 50000-203516
Local Agreement: 19-5352
Start Date: 10 days after award
Completion Date: May 22, 2020
- Prequalification Level:
\$2,746,000.00
- 0.91 mi of hot mix asphalt cold milling and resurfacing, remove and replace concrete patches, concrete curb and gutter, drainage and pavement markings on 14 Mile Road from Dequindre Road to Ryan Road, Macomb County. This is a Local Agency project.
- 5.00 % DBE participation required

7. Letting of August 9, 2019
Letting Call: 1908 008
Project: STU 81000-200818
Local Agreement: 19-5345
Start Date: 10 days after award
Completion Date: September 19, 2022

Prequalification Level:
\$5,180,000.00

New culvert and crossings under railroad, pedestrian bridge and retaining walls on Depot Street and Main Street under Wolverine Line Railroad in the city of Ann Arbor, Washtenaw County. This is a Local Agency project.

5.00 % DBE participation required

On receipt of your approval, projects will, at the Director's discretion, be processed and awarded to the low bidder. I approve the project described in this agenda and authorize the award by the responsible management staff of MDOT to the extent authorized by and in accordance with the December 14, 1983, resolution of the State Transportation Commission and the Director's delegation memorandum of February 11, 2019.

Respectfully submitted,

Signed copy on file

Paul C. Ajegba
Director

INFORMATION FOR MICHIGAN STATE
TRANSPORTATION COMMISSION

July 18, 2019

The following project information is being provided for informational purposes, as requested by the State Transportation Commission.

LOCAL PROJECT

- | | | |
|----|--|---|
| 1. | Letting of June 7, 2019
Letting Call: 1906 050
Project: TAU 58000-204933
Local Agreement: 19-5257
Start Date: 10 days after award
Completion Date: September 19, 2021 | Low Bid: \$453,615.95
Engineer Estimate: \$346,131.00
Pct Over/Under Estimate: 31.05 % |
|----|--|---|

0.59 mi of streetscaping, concrete curb and gutter, sidewalk, sidewalk ramp and pavement markings on Lewis Avenue from Pickard Road to Dean Road, Monroe County. This is a Local Agency project. This is a Small Business Program project. Only those approved by MDOT as a Small Business may be eligible to bid as a prime contractor.

0.00 % DBE participation required

Bidder	As-Submitted	As-Checked	
JB Contractors Inc.	\$453,615.95	Same	1 **

Total Number of Bidders: 1

These projects, for which the bid is under Five Hundred Thousand Dollars (\$500,000) and has less than two (2) bidders or is a low bid rejection or have other bid issues, are being submitted for informational purposes. The contracts for these projects will, at the Director's discretion, be processed and awarded to the low bidder. I approve the projects described in this agenda and authorize the award by the responsible management staff of MDOT to the extent authorized by and in accordance with the December 14, 1983, resolution of the State Transportation Commission and the Director's delegation memorandum February 11, 2019.

Respectfully submitted,

Paul C. Ajegba
Director

EXHIBIT B
Department Projects
Items to the Commission - July 18, 2019

			Total Over the Original Cost (All MDOT)					Total Over the Original Cost (MDOT/MDOT)			Total Over the Original Cost (MDOT/Cons)			
			\$3,935,586.63					\$3,774,161.94			\$161,424.69			
			Number of ProjectsOver 10% (5 Total)			Total Original Contract Amount	Total Final Contract Amount	Total Increase or Decrease	Total Percent					
						\$20,809,313.38	\$24,744,900.01	\$3,935,586.63	18.91%					
Region	Control Section	Job Number	Project Description	Prime Contractor	Original Contract Amount	Final Contract Amount	Increase	Percent	Date Work Started	Expect Compl.	Actual Compl.	Finaled Date	Designed by MDOT (M) or Consultant (C)	Reason for Additional Project Costs
Grand	43022	131778	Up to 113.53 Inmi of hot mix asphalt crack treatment and overband crack filling on various state trunklines and freewaysin the cities of Big Rapids, Fremont, and Grant and the village of Barryton, Lake, Osceola, Newaygo, Mecosta, Muskegon,and Montcalm Counties. This project will be constructed with an innovative contracting method, Fixed Price Variable Scope.	Fahrner Asphalt Sealers, L.L.C.	\$230,000.00	\$261,155.54	\$31,155.54	13.55%	7/9/2018	9/18/2018	9/18/2018	1/9/2019	M	<u>Reason #1:</u> CM #1 included increases for additional segments of Overband Crack Fill and Crack Treatment. This project was a Fixed Price Variable Scope Project where the contractor bid to complete 98.06 miles of the 113.53 available mile for the fixed price of \$ 230,000.00. The increases were due to MDOT request to complete the remaining miles and segments. Reason 1 accounts for 100% of the total increase to the project costs.
Metro	50022	202752	1.27 mi of concrete pavement repairs on M-59 (Hall Road) from Vandyke Avenue to Delco Boulevard in the cities of Utica and Sterling Heights, Macomb County.	Cipparrone Contracting, Inc.	\$2,984,753.82	\$3,670,944.91	\$686,191.09	22.99%	5/21/2018	8/13/2018	8/13/2018	1/8/2019	M	<u>Reason #1:</u> CM #2 included increases to items Pavt Repr, Nonreinf Conc, 11 1/2 inch (\$430,499.85) and Pavt Repr, Rem (\$90,725.18). The pavement was in poor condition prior to construction beginning. At the time of letting, the funds available for construction would not cover the total amount of patches needed to repair the roadway. After letting, additional funds were requested and secured to do more patches. Reason 1 accounts for \$521,225.03, or 76% of the total increase to the project costs.
Bay	29011	110485	12.51 mi of hot mix asphalt overlay, pavement repairs, shoulder reconstruction, drainage, guardrail, bridge clearance, and shared-use path on US-127 from US-127BR (Washington Road)to US-127BR (Lincoln Road) in the city of Ithaca, Gratiot County.	Rieth-Riley Construction Co., Inc.	\$14,940,386.53	\$17,721,759.09	\$2,781,372.56	18.62%	3/9/2016	11/11/2016	9/11/2018	2/26/2019	M	<u>Reason #1:</u> CM #6 (\$886,966.03), CM #7 (\$467,705.62), CM #8 (\$379,709.01), and CM #9 (\$457,226.48). Due to existing subgrade condition found during construction and further review of the existing pavement condition it was determined that the Design fix of joint repairs and two course overlay would not have reached the anticipated design life of the project. MDOT decided to change the fix of joint repairs and two course overlay. Reason 1 accounts for \$2,191,607.14, or 79% of the total increase to the project cost.
Bay	37022	132142	6.02 mi of hot mix asphalt profile cold milling and single-course resurfacing with wedging, centerline corrugations and permanent pavement markings on M-20 from Loomis Road easterly to Geneva Road, Midland County. This project will be constructed with an innovative contracting method, Fixed Price-Variable Scope, to extend the project limits to include a maximum of 1.69 mi to the west, to a location east of Leaton Road.	Central Asphalt, Inc.	\$1,899,656.53	\$2,175,099.28	\$275,442.75	14.50%	7/9/2018	9/28/2018	9/26/2018	2/27/2019	M	<u>Reason #1:</u> CM #1- This project was a Fixed Price-Variable Scope and MDOT increased the project limits. The intent of the project was to manage the construction activities by priority in order to deliver the project with in a pre-established programmed contract amount. Reason 1 accounts for 100% of the total increase to the project cost.
Superior	31012	125835	Traffic signal modernizations, concrete curb, gutter, culvert and sidewalk, sewer, signage, and pavement markings in the cities of Houghton, Marquette, and Negaunee, Houghton and Marquette Counties.	Wright Electric Company, Inc.	\$754,516.50	\$915,941.19	\$161,424.69	21.39%	6/20/2018	10/30/2018	10/30/2018	2/21/2019	C	<u>Reason #1:</u> CM #4- Additional signal locations and hardware were added to the project at the request of the ITS unit. This was to upgrade for connected vehicle technology and in conjunction with House Bill No. 4321 that was intended to support connected vehicle technology for research in the vicinity of Michigan Technological University. Reason 1 accounts for 100% of the total increase to the project cost.

EXHIBIT B
Local Projects
Items to the Commission - July 18, 2019

			Total Over the Original Cost (All Local)					Total Over the Original Cost (Local/Local)			Total Over the Original Cost (Local/Cons)			
			\$2,357,174.36					\$847,879.70			\$1,717,918.52			
			Number of Projects Over 10% (10 Total)			Total Original Contract Amount	Total Final Contract Amount	Total Increase or Decrease	Total Percent					
						\$8,457,166.30	\$11,022,964.52	\$2,565,798.22	30.34%					
Region	Control Section	Job Number	Project Description	Prime Contractor	Original Contract Amount	Final Contract Amount	Increase	Percent	Date Work Started	Expect Compl.	Actual Compl.	Final Date	Designed by Local (L) or Consultant (C)	Reason for Additional Project Costs
University	23000	130448	1.50 mi of hot mix asphalt cold milling and resurfacing, concrete curb and gutter, surface drainage, storm sewer, ADA sidewalk ramps and pavement markings on Willow Highway from Elmwood Road to Waverly Road, Eaton County.	Rieth-Riley Construction Co., Inc.	\$820,035.73	\$1,060,921.19	\$240,885.46	29.37%	6/12/2017	8/25/2017	9/18/2017	8/16/2018	L	<u>Reason #1:</u> CM #1 increased items Curb and Gutter, Conc, Det F4 (\$8,632.80) and Curb and Gutter, Rem (\$6,037.02). The existing curb and gutter on the north side of Willow Highway was shown to remain in the plans. After removal of the HMA overlay of the gutter pan, it was determined that the curb and gutter needed to be replaced. <u>Reason #2:</u> CM #1 increased item Driveway, Nonreinf Conc, 6 inch (\$28,512.56) and CM #2 increased item Driveway, Nonreinf Conc, 6 inch (\$6,803.80). Additional quantities were needed to make the driveway grades meet the MDOT Standard plans specification. <u>Reason #3:</u> CM #2 increased item Slope Restoration Modified (\$23,692.80). Slope Restoration behind the curb was wider than estimated during design. <u>Reason #4:</u> CM #2 increased item HMA, 13A (\$81,677.75). The designed curb and gutter elevations were set based on existing pavement centerline grades. The existing road cross slope was less than 2%and additional HMA was required to achieve the 2% cross slope. Reasons 1-4 account for \$155,356.73, or 64% of the total increase to the project costs.
Metro	82457	104681	0.29 mi of concrete pavement reconstruction, concrete filler wall, impact attenuator, permanent signing, pavement markings, and watermain on Wyoming Avenue under ConrailRailroad and the Southern Street bridges in the city ofDearborn, Wayne County	Angelo lafrate Construction Company	\$1,452,884.78	\$1,950,662.59	\$497,777.81	34.26%	9/9/2013	5/20/2017	5/20/2017	12/3/2018	L	<u>Reason #1:</u> CM #1 (\$282,194.00), CM #3 (\$30,285.84), and CM #6 (\$23,302.43). During construction, the existing storm sewer along Wyoming Road was found to be in poor condition warranting immediate replacement. Reason 1 accounts for \$335,782.27, or 67% of the total increase to the project costs.
University	38000	130215	8.44 mi of hot mix asphalt wedging, single chip sealing, fogsealing and pavement markings on Michigan Avenue from the west Parma village limits to Glasgow Road, on Berry Road from Rives Eaton Road to Lansing Avenue and on Rives Eaton Road from Berry Road to Perrine Road, Jackson County.	Highway Maintenance and Construction Com	\$515,194.65	\$617,368.32	\$102,173.67	19.83%	5/1/2018	7/4/2018	8/11/2018	2/11/2019	L	<u>Reason #1:</u> CM #1 added item Micro-Surface Rutfilling (\$84,000.00). The existing HMA surface was in worse condition than originally planned. The rutfilling was necessary to achieve satisfactory completion and improve safety. Reason 1 accounts for \$84,000.00, or 82%of the total increase to the project costs.
Grand	41000	200488	Signal modernization, pedestrian signal upgrades, detection, and audible pedestrian beacons on Michigan Street from Monroe Avenue to Bostwick Avenue in the city of Grand Rapids, Kent County	Strain Electric Company	\$141,385.00	\$177,525.51	\$36,140.51	25.56%	6/19/2018	8/19/2018	9/12/2018	2/27/2019	C	<u>Reason #1:</u> CM #1 (\$35,530.00). Additional costs were due to the need to increase pedestrian safety at the intersection of Ionia Avenue and Michigan Street. The additional work at Ionia was requested after the project was let in an effort to improve pedestrian safety at the intersection. Reason 1 accounts for \$35,530.00, or 98% of the total increase to the project costs.
Bay	09000	129762	0.18 mi of hot mix asphalt surfacing, paving interlayer, concrete curb, gutter, sidewalk and ramps, watermain, storm sewer and drainage on Patterson Avenue from Marquette Avenue northerly to Smith Street in the city of Bay City, Bay County.	Rohde Bros. Excavating, Inc.	\$478,124.00	\$529,218.82	\$51,094.82	10.69%	9/5/2017	5/1/2018	9/19/2018	3/11/2019	C	<u>Reason #1:</u> CM #3 includes an increase of \$32,183.90. The existing pipe beneath the roadway was severely deteriorated and had to be removed, instead of abandoned. This resulted in requiring the existing concrete pavement to be removed and a new HMA pavement structure was constructed instead of an HMA overlay. Reason 1 accounts for \$32,183.90, or 63% of the total increase to the project costs.
Metro	63451	131196	0.90 mi of pavement removal, hot mix asphalt surfacing, aggregate base, storm sewer, drainage, concrete curb, gutter, sidewalk and ramps, guardrail, watermain and pavement markingson North Saginaw Street from Woodward Avenue to Montcalm Street in the city of Pontiac, Oakland County.	Boddy Construction Company, Inc.	\$2,607,041.00	\$3,631,336.19	\$1,024,295.19	39.29%	3/13/2017	6/30/2017	7/3/2018	3/11/2019	C	<u>Reason #1:</u> CM #4 (\$63,307.04) and CM #5 (\$122,266.30) included compensation for delays to the watermain installation due to differing subsurface conditions than planned, the need for additional bends and turns to the watermain. <u>Reason #2:</u> CM #6 had increases of \$338,175.60 for Additional Storm Sewer repairs that were needed as the existing storm sewers were in worse shape than planned. <u>Reason #3:</u> CM #9 had increases of \$125,918.08 due to the project running into the late fall and needing additional work due to the colder weather. Due to the delays caused in Reasons #1 & #2, the project work was pushed into late fall including the necessity to work beyond the seasonal suspension for contract work. This led to concerns with both the placement of concrete on the project and the schedule for the HMA paving. Reasons 1-3 account for \$649,667.02, or 63% of the total increase to the project costs.
University	23000	133149	Concrete overlay, bridge railing replacement, cleaning and coating of steel beams, culvert, approach work and pavement markings on Ionia Road over Thornapple River, Eaton County.	Grand River Construction, Inc.	\$369,853.01	\$412,520.57	\$42,667.56	11.54%	7/9/2018	11/15/2018	11/15/2018	3/14/2019	C	<u>Reason #1:</u> CM #2 includes extra items for repairing unsound fascia concrete that started to chip out while drilling and installing the new railing reinforcement. The repairs to the fascia concrete were required to help preserve the overall longevity of the structure. Reason 1 accounts for \$30,375.10, or 71% of the total increase to the project costs.
Grand	03005	126672	Bridge removal and replacement with prestressed concrete beams, concrete approach, curb, gutter, culvert, guardrail, cofferdam and steel piles on 30th Street over Little Rabbit River, Allegan County.	Grand River Construction, Inc.	\$1,161,990.77	\$1,517,087.35	\$355,096.58	30.56%	7/17/2017	10/27/2017	5/11/2018	4/22/2019	C	<u>Reason #1:</u> Contract Modification #1 increased project costs \$172,206.64 due to a contaminate found inside the coffer dam when the old abutment was removed. It was not evident in the soil borings conducted in the design phase. The contractor was required to subcontract the environmental cleanup and proper disposal of the material. <u>Reason #2:</u> Contract Modification #5 increased project costs \$80,104.51 for the contractors idle time due to the environmental cleanup requirement. <u>Reason #3:</u> Contract Modification #6 increased the project cost \$55,244.02 for the contractors idle time due to flood delays and remobilization after the winter season. This was all a chain reaction of lost time due to the environmental cleanup. Reasons 1-3 account for \$307,555.17 or 87% of the total increase to the project costs.

EXHIBIT B
Local Projects
Items to the Commission - July 18, 2019

			Number of Projects Over 10% (10 Total)			Total Original Contract Amount	Total Final Contract Amount	Total Increase or Decrease	Total Percent					
						\$8,457,166.30	\$11,022,964.52	\$2,565,798.22	30.34%					
Region	Control Section	Job Number	Project Description	Prime Contractor	Original Contract Amount	Final Contract Amount	Increase	Percent	Date Work Started	Expect Compl.	Actual Compl.	Finaled Date	Designed by Local (L) or Consultant (C)	Reason for Additional Project Costs
Superior	17400	126883	Application of pavement markings on various routes countywide, Chippewa County.	Michigan Pavement Markings, LLC	\$45,225.14	\$52,267.90	\$7,042.76	15.57%	6/14/2016	6/24/2016	6/17/2016	4/5/2019	L	Reason #1: CM #1 increased item Pavt Mrkg, Reg Dry, 4 inch, Yellow, Special. The increase was due to retracing and reestablishment of no pass zones, which were not legible during design, resulting in this marking being underestimated. Reason 1 accounts for \$5,493.88, or 78% of the total increase to the project costs.
North	10000	119196	3.50 mi of hot mix asphalt overlay, trenching, earth excavation, embankment, guardrail and pavement markings on MarshallRoad from Homestead Road north to US-31, Benzie County.	Elmer's Crane and Dozer, Inc.	\$865,432.22	\$1,074,056.08	\$208,623.86	24.11%	7/9/2018	8/22/2018	8/22/2018	4/22/2019	C	Reason #1: CM #3 increased item HMA, LVSP (\$88,531.94). Additional HMA was required because the existing HMA was more deteriorated then planned on. Reason #2: CM #3 increased item Aggregate Base (\$42,569.05). More aggregate base was necessary to backfill trenches and build the aggregate base to design depths/width necessary for the construction guardrail and raised edge. Reason #3: CM #4 included item Excavation, Earth (\$29,718.22). More excavation was required then planned to balance grades and provide stable slopes. Reasons 1-3 account for \$160,819.21, or 77% of the total increase to the project costs.

Performance Matrix: Comparison of Original Contract Costs and Final Contract Costs

Current Summary of MDOT Projects

Time Period	Original Contract Cost	Final Contract Cost	Percent Difference
Current Month, June 2019	\$126,082,515.49	\$124,400,093.55	-1.33%
May 2019	\$22,071,132.58	\$20,971,459.05	-4.98%
April 2019	\$139,999,852.38	\$144,661,808.05	3.33%
2019 Fiscal Year	\$843,416,820.22	\$843,580,024.90	0.02%

Five Year Summary of MDOT Projects

Calendar Year	Original Contract Cost	Final Contract Cost	Percent Difference
2015	\$709,329,893.84	\$712,559,685.99	0.46%
2016	\$690,303,760.44	\$704,409,643.58	2.04%
2017	\$865,144,563.78	\$862,462,531.03	-0.31%
2018	\$625,072,360.55	\$634,821,481.36	1.56%
2019	\$760,269,726.34	\$758,491,431.36	-0.23%

MDOT

CONSTRUCTION PROJECTS FINALED IN APRIL 2019

		2					2			0						
		MDOT Projects With an Original Contract Amount of					MDOT Projects Designed by MDOT With an Original Contract Amount of			MDOT Projects Designed by Consultants With an Original Contract Amount of						
		\$139,999,852.38					\$80,502,986.15			\$59,496,866.23						
		Total Over the Original Cost					Total Over the Original Cost			Total Over the Original Cost						
		4,661,955.67					3,517,220.12			1,144,735.55						
		Projects Finaled This Month (14 Total)			Total Original Contract Amount	Total Final Contract Amount	Total Increase or Decrease	Total Percent		# of Jobs Over 10%	# of Jobs Under					
					139,999,852.38	144,661,808.05	4,661,955.67	3.33%		0	7					
Region	Date	Prefix	Control Section	Job Number	Original Contract Amount	Final Contract Amount	Increase or Decrease	Percent Over or Under	Jobs Over 10%	Date Work Started	Expect Compl.	Actual Compl.	Δ Days **	Designed by MDOT or Cons.	PE Oversight	
Metro	4/23/2019	HSIP	63000	201472A	\$2,372,287.90	\$2,124,057.42	(248,230.48)	-10.46%		5/7/2018	12/1/2018	12/5/2018	4	M	Nguyen Nguyen - Metro Region	
Metro	4/15/2019	HSIP	63000	201474A	\$1,128,553.40	\$1,033,784.10	(94,769.30)	-8.40%		5/14/2018		12/4/2018	0	M	Nguyen Nguyen - Metro Region	
Metro	4/29/2019	ST	63173	200002A	\$129,814.00	\$117,079.80	(12,734.20)	-9.81%		7/16/2018		9/18/2018	0	M	Jeffrey Pitt - Oakland TSC	
Metro	4/17/2019	BHN	82073	54049A	\$46,318,954.00	\$47,343,754.00	1,024,800.00	2.21%		2/27/2013	5/15/2015	10/24/2018	1259	C	Victor Judnic - HNTB	
Metro	4/15/2019	IM	82123	119189A	\$2,690,753.92	\$2,709,025.42	18,271.50	0.68%		7/29/2016	9/30/2018	7/6/2017	-452	M	Bonnie Yu - Detroit TSC	
North	4/2/2019	M	51021	202705A	\$617,218.72	\$678,248.79	61,030.07	9.89%		9/4/2018		11/9/2018	0	M	Dave Pax - Traverse City TSC	
Southwest	4/23/2019	HSIP	39000	201479A	\$1,560,471.31	\$1,569,342.92	8,871.61	0.57%		5/16/2018	11/30/2018	12/8/2018	8	M	Andy Stamm-Southwest Region	
Southwest	4/16/2019	IM	39025	118994A	\$1,568,356.81	\$1,611,668.00	43,311.19	2.76%		3/14/2016	9/30/2016	9/10/2018	711	C	Jim Woods-Kalamazoo TSC	
Southwest	4/16/2019	IM	39025	112614A	\$10,626,313.00	\$10,755,793.00	129,480.00	1.22%		3/14/2016	9/30/2016	9/10/2018	711	C	Jim Woods-Kalamazoo TSC	
Southwest	4/22/2019	ST	39081	131571A	\$983,778.00	\$902,788.41	(80,989.59)	-8.23%		8/27/2018	10/19/2018	10/19/2018	0	M	Jim Woods-Kalamazoo TSC	
Superior	4/1/2019	HSIP	21000	201484A	\$421,006.00	\$374,839.08	(46,166.92)	-10.97%		7/5/2018		10/31/2018	0	M	Alan Anderson - Ishpeming TSC	
University	4/9/2019	NH	19000	200832A	\$311,400.00	\$308,380.00	(3,020.00)	-0.97%		10/29/2018		11/21/2018	0	M	Jason Early-Lansing TSC	
University	4/22/2019	IMG	47000	122202A	\$983,242.42	\$930,386.78	(52,855.64)	-5.38%		5/15/2018	11/1/2018	11/7/2018	6	C	Jason Early-Lansing TSC	
University	4/8/2019	IM	47064	112877A	\$70,287,702.90	\$74,202,660.33	3,914,957.43	5.57%		3/3/2015	10/31/2018	10/31/2018	0	M	Jim Daavettilla-Brighton TSC	
					Original		Final	Over/Under %								
				All MDOT	\$139,999,852.38	All MDOT Proj	\$144,661,808.05	3.33%								
				MDOT/MDOT	\$80,502,986.15	MDOT Des.	\$84,020,206.27	4.37%								
				MDOT/Cons.	\$59,496,866.23	Cons. Designed	\$60,641,601.78	1.92%								

LOCAL

CONSTRUCTION PROJECTS FINALED IN APRIL 2019

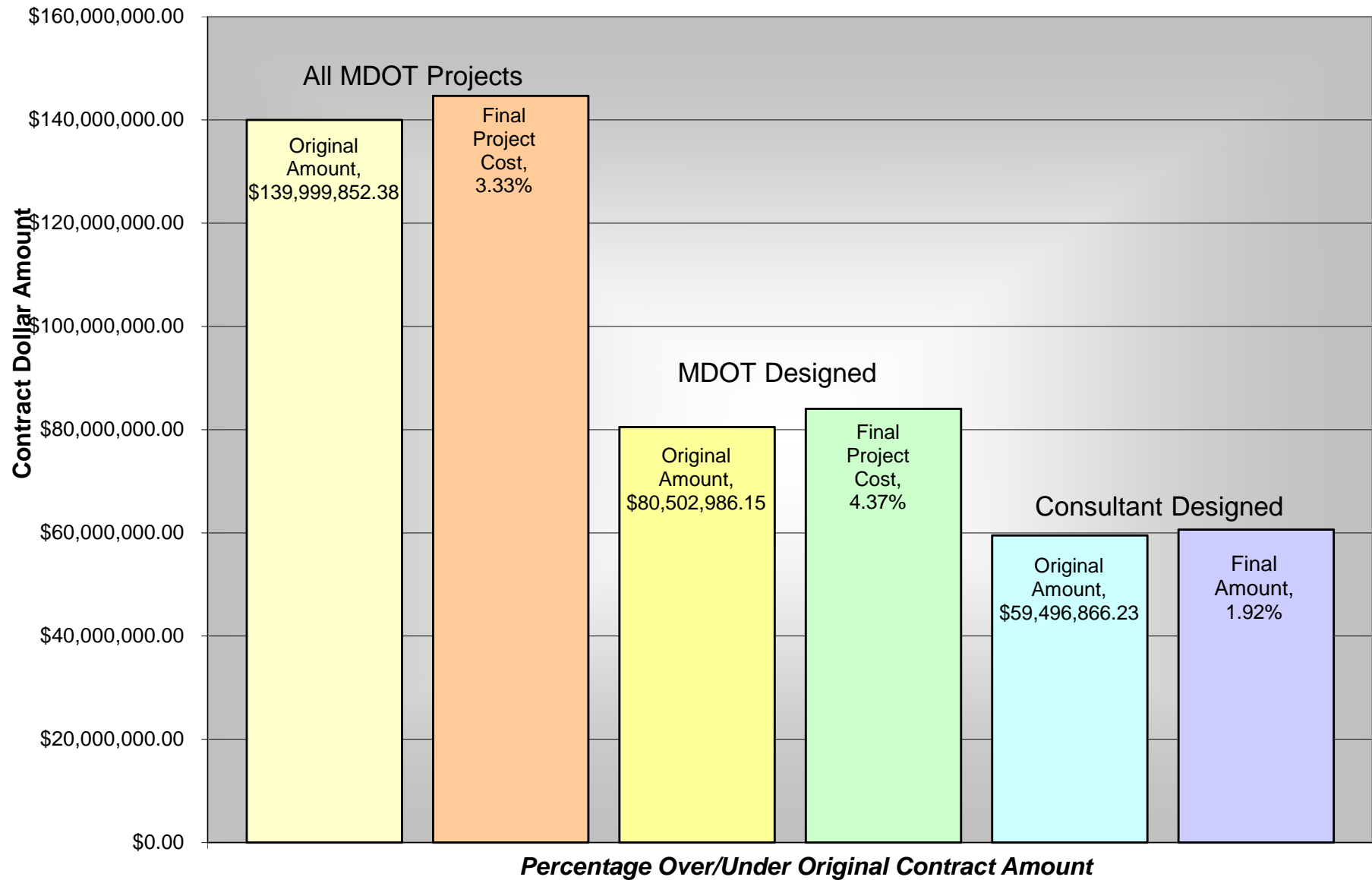
LOCAL PROJECTS FINALED THIS MONTH (39 Total)				TOTAL ORIGINAL CONTRACT AMOUNT	TOTAL FINAL CONTRACT AMOUNT	TOTAL INCREASE OR DECREASE	TOTAL PERCENT		# OF JOBS OVER 10%	#OF JOBS UNDER
				30,287,697.34	30,239,155.34	(48,542.00)	-0.16%		4	23
Date	Prefix	Control Section	Job Number	Original Contract Amount	Final Contract Amount	Increase or Decrease	Percent Over or Under	Jobs Over 10%	Date Work Started	Designed by
4/2/2019	MCS	24000	129318A	\$516,722.89	\$593,382.98	76,660.09	14.84%	*	8/29/2018	C
4/2/2019	MCS	41000	202402A	\$320,041.74	\$315,583.29	(4,458.45)	-1.39%		7/25/2018	C
4/2/2019	CMG	63000	132547A	\$302,131.33	\$290,790.80	(11,340.53)	-3.75%		5/2/2018	C
4/2/2019	TAU	63459	132531A	\$287,452.09	\$256,159.39	(31,292.70)	-10.89%		6/1/2018	C
4/2/2019	FLAP	73000	130989A	\$1,360,650.25	\$1,412,980.87	52,330.62	3.85%		10/1/2018	C
4/2/2019	BO	77000	129314A	\$542,229.63	\$537,251.27	(4,978.36)	-0.92%		10/8/2018	L
4/3/2019	STL	18555	130244A	\$662,775.90	\$664,662.26	1,886.36	0.28%		6/25/2018	C
4/3/2019	STU	81475	127198A	\$7,682,391.56	\$7,379,564.39	(302,827.17)	-3.94%		10/31/2018	C
4/4/2019	STU	82000	203162A	\$1,596,125.00	\$1,589,960.00	(6,165.00)	-0.39%		11/8/2018	L
4/5/2019	STUL	9000	129752A	\$258,630.40	\$266,505.86	7,875.46	3.05%		6/9/2017	C
4/5/2019	STL	17400	126883A	\$45,225.14	\$52,267.90	7,042.76	15.57%	*	6/17/2016	L
4/9/2019	TAL	10019	130895A	\$627,991.10	\$584,087.97	(43,903.13)	-6.99%		5/8/2018	C
4/9/2019	STL	79555	127977A	\$713,854.85	\$732,563.66	18,708.81	2.62%		9/19/2018	C
4/9/2019	STRH	82099	131077A	\$36,339.32	\$35,349.90	(989.42)	-2.72%		5/29/2018	L
4/11/2019	STU	58000	200045A	\$349,988.50	\$334,063.98	(15,924.52)	-4.55%		10/29/2018	L
4/15/2019	STUL	73000	130446A	\$2,218,276.80	\$2,306,713.52	88,436.72	3.99%		6/6/2018	C
4/15/2019	SUG	82457	127711A	\$1,257,811.74	\$1,222,644.06	(35,167.68)	-2.80%		8/11/2017	L
4/16/2019	EDF	11000	202473A	\$491,886.00	\$448,522.33	(43,363.67)	-8.82%		7/25/2018	L
4/16/2019	STU	80000	121411A	\$347,173.52	\$359,333.45	12,159.93	3.50%		5/15/2017	C
4/16/2019	TA	80159	123588A	\$367,222.83	\$336,475.28	(30,747.55)	-8.37%		5/15/2017	C
4/16/2019	EDCF	82544	126612A	\$278,973.00	\$199,968.92	(79,004.08)	-28.32%		11/23/2016	C
4/16/2019	STH	82609	119579A	\$685,192.00	\$615,827.15	(69,364.85)	-10.12%		7/25/2015	L
4/16/2019	STH	82609	119576A	\$552,750.12	\$470,915.00	(81,835.12)	-14.81%		7/25/2015	L
4/16/2019	STH	82609	119577A	\$798,366.75	\$707,341.35	(91,025.40)	-11.40%		7/25/2015	L
4/17/2019	STUL	11000	133290A	\$1,336,750.25	\$1,331,340.21	(5,410.04)	-0.40%		9/4/2018	C

LOCAL

CONSTRUCTION PROJECTS FINALED IN APRIL 2019

LOCAL PROJECTS FINALED THIS MONTH (39 Total)				TOTAL ORIGINAL CONTRACT AMOUNT	TOTAL FINAL CONTRACT AMOUNT	TOTAL INCREASE OR DECREASE	TOTAL PERCENT		# OF JOBS OVER 10%	#OF JOBS UNDER
				30,287,697.34	30,239,155.34	(48,542.00)	-0.16%		4	23
Date	Prefix	Control Section	Job Number	Original Contract Amount	Final Contract Amount	Increase or Decrease	Percent Over or Under	Jobs Over 10%	Date Work Started	Designed by
4/17/2019	STL	74000	130243A	\$206,992.40	\$205,130.28	(1,862.12)	-0.90%		9/8/2018	C
4/17/2019	EMRP	79000	202695A	\$15,484.42	\$15,484.42	0.00	0.00%		10/18/2018	C
4/22/2019	MCS	3005	126672A	\$1,161,990.77	\$1,517,087.35	355,096.58	30.56%	*	5/11/2018	C
4/22/2019	STL	10000	119196A	\$865,432.22	\$1,074,056.08	208,623.86	24.11%	*	8/22/2018	C
4/22/2019	BO	74000	129284A	\$613,853.26	\$615,178.15	1,324.89	0.22%		10/11/2018	C
4/23/2019	STUL	18000	200416A	\$548,113.18	\$506,507.51	(41,605.67)	-7.59%		7/19/2018	C
4/23/2019	TAU	25049	127951A	\$566,562.49	\$515,390.09	(51,172.40)	-9.03%		7/12/2018	C
4/23/2019	STL	43555	130477A	\$459,675.00	\$489,952.09	30,277.09	6.59%		6/29/2018	C
4/24/2019	STL	34141	123596A	\$246,952.25	\$235,264.66	(11,687.59)	-4.73%		10/31/2018	C
4/24/2019	HRRR	58000	200272A	\$61,366.35	\$55,487.02	(5,879.33)	-9.58%		9/30/2018	L
4/29/2019	STUL	11000	130797A	\$148,388.75	\$143,252.27	(5,136.48)	-3.46%		5/23/2018	L
4/29/2019	STUL	11421	126298A	\$773,012.02	\$809,877.05	36,865.03	4.77%		5/31/2017	C
4/29/2019	STL	43555	133215A	\$437,485.56	\$457,570.54	20,084.98	4.59%		7/31/2018	C
4/29/2019	HSIP	58000	200508A	\$545,435.96	\$554,662.04	9,226.08	1.69%		11/8/2018	L

MDOT Construction Projects Finaled April 2019



MDOT

CONSTRUCTION PROJECTS FINALED IN MAY 2019

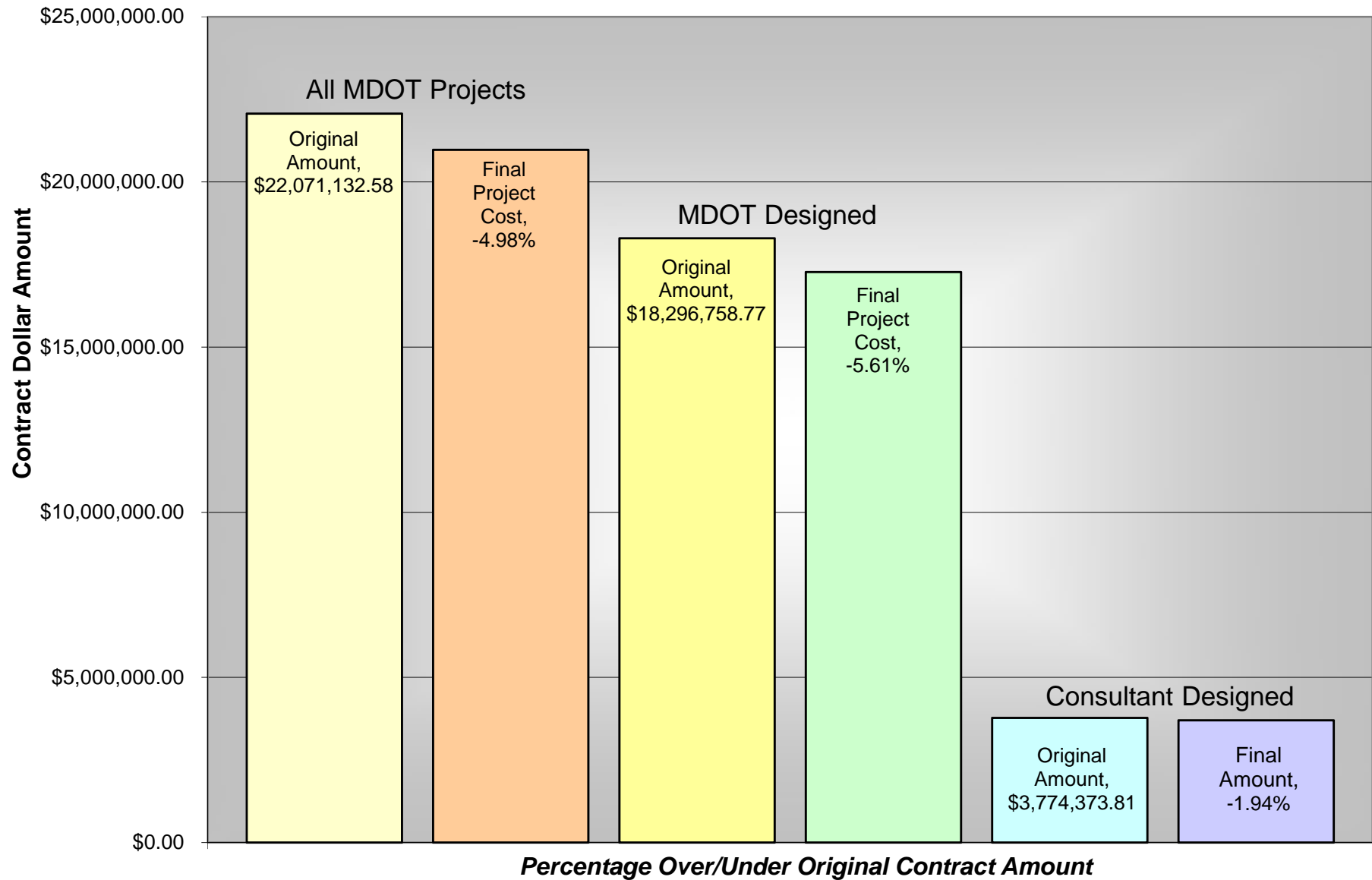
		2					2			0						
		MDOT Projects With an Original Contract Amount of					MDOT Projects Designed by MDOT With an Original Contract Amount of			MDOT Projects Designed by Consultants With an Original Contract Amount of						
		\$22,071,132.58					\$18,296,758.77			\$3,774,373.81						
		Total Over the Original Cost					Total Over the Original Cost			Total Over the Original Cost						
		(1,099,673.53)					(1,026,441.91)			(73,231.62)						
		Projects Finalized This Month (18 Total)			Total Original Contract Amount	Total Final Contract Amount	Total Increase or Decrease	Total Percent		# of Jobs Over 10%	# of Jobs Under					
					22,071,132.58	20,971,459.05	(1,099,673.53)	-4.98%		0	14					
Region	Date	Prefix	Control Section	Job Number	Original Contract Amount	Final Contract Amount	Increase or Decrease	Percent Over or Under	Jobs Over 10%	Date Work Started	Expect Compl.	Actual Compl.	Δ Days **	Designed by MDOT or Cons.	PE Oversight	
Bay	5/28/2019	M	32032	130053A	\$1,273,066.82	\$1,224,316.56	(48,750.26)	-3.83%		6/12/2018	9/14/2018	10/14/2018	30	M	Brian Ulman - Bay City TSC	
Bay	5/30/2019	M	74032	200541A	\$3,213,124.06	\$2,906,329.08	(306,794.98)	-9.55%		7/31/2018		11/8/2018	0	M	Craig Innis - Huron TSC	
Bay	5/30/2019	ST	77023	103342A	\$32,167.92	\$30,595.38	(1,572.54)	-4.89%		7/11/2018	9/14/2018	8/21/2018	-24	M	Nate Whiting - Rowe Professional Serv	
Bay	5/30/2019	IM	77023	132136A	\$1,881,020.32	\$1,772,019.37	(109,000.95)	-5.79%		7/11/2018	9/14/2018	8/21/2018	-24	M	Nate Whiting - Rowe Professional Serv	
Bay	5/30/2019	ST	77024	103343A	\$52,700.64	\$51,729.74	(970.90)	-1.84%		7/11/2018	9/14/2018	8/21/2018	-24	M	Nate Whiting - Rowe Professional Serv	
Bay	5/28/2019	M	79052	130047A	\$2,595,976.44	\$2,393,643.08	(202,333.36)	-7.79%		6/12/2018	9/14/2018	10/14/2018	30	M	Brian Ulman - Bay City TSC	
Grand	5/23/2019	STL	43011	202233A	\$15,014.92	\$9,548.05	(5,466.87)	-36.41%		4/16/2018	6/8/2018	6/29/2018	21	M	Kevin McReynolds - Cadillac TSC	
Grand	5/23/2019	ST	43011	131558A	\$416,144.97	\$395,432.47	(20,712.50)	-4.98%		4/16/2018	6/8/2018	6/29/2018	21	M	Kevin McReynolds - Cadillac TSC	
Metro	5/6/2019	IM	82191	126863A	\$3,073,596.23	\$3,126,660.34	\$53,064.11	1.73%		1/28/2017	10/7/2017	10/7/2017	0	M	Olukayode Adefeso - Detroit TSC	
North	5/29/2019	NH	28051	131768A	\$340,675.01	\$364,546.59	\$23,871.58	7.01%		8/12/2018	9/30/2018	9/6/2018	-24	M	Dave Pax - Traverse City TSC	
North	5/29/2019	NH	40011	131753A	\$1,708,723.91	\$1,549,384.25	(159,339.66)	-9.33%		5/15/2018	8/3/2018	7/26/2018	-8	M	Dave Pax - Traverse City TSC	
North	5/29/2019	M	45021	200516A	\$1,045,150.09	\$1,011,127.85	(34,022.24)	-3.26%		8/10/2018	9/30/2018	9/21/2018	-9	M	Dave Pax - Traverse City TSC	
University	5/15/2019	HSIP	19031	116353A	\$1,078,617.34	\$1,100,607.58	\$21,990.24	2.04%		6/8/2018	11/15/2018	10/26/2018	-20	C	Jason Early-Lansing TSC	
University	5/20/2019	M	23021	200418A	\$2,050,627.36	\$1,802,869.44	(247,757.92)	-12.08%		8/16/2018		11/5/2018	0	M	Jason Early-Lansing TSC	
University	5/15/2019	ST	33014	130168A	\$598,770.08	\$632,114.66	\$33,344.58	5.57%		6/4/2018	10/5/2018	10/11/2018	6	M	Jason Early-Lansing TSC	
University	5/15/2019	NH	38101	200411A	\$1,061,545.85	\$1,000,946.73	(60,599.12)	-5.71%		9/5/2017	8/3/2018	8/17/2018	14	C	Jason Early-Lansing TSC	
University	5/21/2019	MER	47064	201982A	\$350,175.62	\$328,068.99	(22,106.63)	-6.31%		4/12/2018		9/10/2018	0	C	Jim Daavettilla-Brighton TSC	
University	5/21/2019	IM	47064	201981A	\$1,284,035.00	\$1,271,518.89	(12,516.11)	-0.97%		4/12/2018		9/10/2018	0	C	Jim Daavettilla-Brighton TSC	
				Original		Final		Over/Under %								
			All MDOT		\$22,071,132.58	All MDOT Proj	\$20,971,459.05	-4.98%								
			MDOT/MDOT		\$18,296,758.77	MDOT Des.	\$17,270,316.86	-5.61%								
			MDOT/Cons.		\$3,774,373.81	Cons. Designed	\$3,701,142.19	-1.94%								

LOCAL

CONSTRUCTION PROJECTS FINALED IN MAY 2019

LOCAL PROJECTS FINALED THIS MONTH (14 Total)				TOTAL ORIGINAL CONTRACT AMOUNT	TOTAL FINAL CONTRACT AMOUNT	TOTAL INCREASE OR DECREASE	TOTAL PERCENT		# OF JOBS OVER 10%	#OF JOBS UNDER
				11,526,939.43	11,573,407.87	46,468.44	0.40%		1	8
Date	Prefix	Control Section	Job Number	Original Contract Amount	Final Contract Amount	Increase or Decrease	Percent Over or Under	Jobs Over 10%	Date Work Started	Designed by
5/2/2019	CMG	82400	131153A	\$469,130.46	\$463,813.32	(5,317.14)	-1.13%		10/10/2017	C
5/6/2019	CMG	63000	131823A	\$231,997.45	\$230,524.78	(1,472.67)	-0.63%		6/19/2018	L
5/8/2019	STRH	58000	202137A	\$209,979.81	\$196,865.56	(13,114.25)	-6.25%		11/16/2018	C
5/8/2019	STL	64000	200493A	\$176,284.52	\$159,383.86	(16,900.66)	-9.59%		9/28/2018	C
5/8/2019	CMG	82900	131154A	\$2,279,808.67	\$2,317,631.92	37,823.25	1.66%		10/31/2017	L
5/15/2019	EDD	35000	130273A	\$259,416.06	\$253,443.58	(5,972.48)	-2.30%		8/1/2018	L
5/15/2019	STL	48555	110144A	\$442,454.10	\$452,328.90	9,874.80	2.23%		8/30/2018	L
5/15/2019	STU	63000	202021A	\$2,137,369.51	\$2,160,823.54	23,454.03	1.10%		10/5/2018	L
5/15/2019	NH	63000	202066A	\$574,459.11	\$567,567.99	(6,891.12)	-1.20%		9/18/2018	L
5/15/2019	STU	82459	131174A	\$3,260,417.04	\$3,325,245.88	64,828.84	1.99%		8/7/2017	L
5/21/2019	STL	35141	130272A	\$549,716.08	\$550,876.83	1,160.75	0.21%		9/25/2018	L
5/21/2019	STUL	61121	123932A	\$219,830.00	\$217,610.48	(2,219.52)	-1.01%		5/25/2016	C
5/22/2019	NH	63000	202072A	\$433,733.27	\$358,249.98	(75,483.29)	-17.40%		9/27/2018	L
5/23/2019	STL	40000	202337A	\$282,343.35	\$319,041.25	36,697.90	13.00%	*	8/31/2018	C

MDOT Construction Projects Finaled May 2019



MDOT

CONSTRUCTION PROJECTS FINALED IN JUNE 2019

		2						1				1							
		MDOT Projects With an Original Contract Amount of						MDOT Projects Designed by MDOT With an Original Contract Amount of				MDOT Projects Designed by Consultants With an Original Contract Amount of							
		\$126,082,515.49						\$29,252,705.47				\$96,829,810.02							
		Total Over the Original Cost						Total Over the Original Cost				Total Over the Original Cost							
		(1,682,421.94)						(112,682.45)				(1,569,739.49)							
		Projects Finaled This Month (26 Total)				Total Original Contract Amount	Total Final Contract Amount	Total Increase or Decrease	Total Percent		# of Jobs Over 10%	# of Jobs Under							
					126,082,515.49	124,400,093.55	(1,682,421.94)	-1.33%		2	15								
Region	Date	Prefix	Control Section	Job Number	Original Contract Amount	Final Contract Amount	Increase or Decrease	Percent Over or Under	Jobs Over 10%	Date Work Started	Expect Compl.	Actual Compl.	Δ Days **	Designed by MDOT or Cons.	PE Oversight				
Bay	6/19/2019	STG	6091	125604A	\$1,081,690.09	\$1,148,768.23	67,078.14	6.20%		4/16/2018	8/31/2018	8/31/2018	0	C	Brian Ulman- Bay City TSC				
Bay	6/24/2019	HSIP	73101	127503A	\$179,311.90	\$167,314.10	(11,997.80)	-6.69%		9/25/2018	11/9/2018	4/10/2019	151	M	Brian Ulman- Bay City TSC				
Grand	6/24/2019	IM	41025	112943A	\$9,929,594.31	\$9,619,053.14	(310,541.17)	-3.13%		8/8/2015	9/30/2018	9/28/2018	-2	M	Nathan VanDrunen-Grand Rapids TSC				
Grand	6/24/2019	CM	41025	113389A	\$5,081,359.56	\$5,561,712.19	480,352.63	9.45%		8/8/2015	9/30/2018	9/28/2018	-2	M	Nathan VanDrunen-Grand Rapids TSC				
Grand	6/24/2019	STU	41481	124394A	\$780,650.08	\$751,712.17	(28,937.91)	-3.71%		8/8/2015	9/30/2018	9/28/2018	-2	M	Nathan VanDrunen-Grand Rapids TSC				
Grand	6/10/2019	M	59031	200917A	\$581,204.26	\$535,971.44	(45,232.82)	-7.78%		7/10/2018	5/23/2019	8/17/2018	-279	M	Kara Stein-Grand Rapids TSC				
Grand	6/13/2019	NH	67022	131667A	\$544,035.22	\$518,603.56	(25,431.66)	-4.67%		10/15/2018	10/20/2018	11/21/2018	32	M	Kevin McReynolds - Cadillac TSC				
Metro	6/10/2019	NH	63174	122109B1	\$277,145.00	\$230,637.50	(46,507.50)	-16.78%		11/15/2018	11/30/2018	5/14/2019	165	M	Scott Singer-Macomb TSC				
Metro	6/4/2019	NH	63174	115576A	\$90,870,500.00	\$88,739,727.00	(2,130,773.00)	-2.34%		8/15/2016	6/30/2018	11/20/2018	142	C	Brian Travis - Oakland TSC				
Metro	6/27/2019	CM	63174	120422A	\$496,274.73	\$496,295.89	21.16	0.00%		8/1/2017	10/15/2018	10/15/2018	0	C	Lori Swanson - Oakland TSC				
Metro	6/4/2019	MER	82023	202459A	\$121,338.50	\$114,676.05	(6,662.45)	-5.49%		6/22/2018		8/28/2018	0	M	Roger Teale-Detroit TSC				
Metro	6/21/2019	NH	82081	123934A	\$2,694,756.14	\$2,619,620.26	(75,135.88)	-2.79%		4/8/2018	6/25/2018	6/26/2018	1	M	Jeff Horne-Taylor TSC				
Metro	6/19/2019	M	82141	M71783	\$219,887.00	\$216,190.15	(3,696.85)	-1.68%		9/5/2017	11/15/2017	3/17/2018	122	M	John Sanford-Taylor TSC				
Metro	6/5/2019	MX	82194	113693B4	\$1,234,200.00	\$1,356,088.17	121,888.17	9.88%		7/11/2017	5/15/2018	5/1/2018	-14	C	Roger Teale-Detroit TSC				
Metro	6/5/2019	MX	82194	113717B7	\$287,675.00	\$444,670.06	156,995.06	54.57%	*	9/13/2017	7/13/2018	5/18/2018	-56	C	Roger Teale-Detroit TSC				
Metro	6/5/2019	MX	82194	113693B5	\$246,010.00	\$236,696.98	(9,313.02)	-3.79%		8/3/2017	4/30/2018	2/19/2018	-69	C	Roger Teale-Detroit TSC				
North	6/24/2019	ST	83032	131067A	\$164,935.57	\$174,405.71	9,470.14	5.74%		7/9/2018	7/27/2018	7/25/2018	-2	M	Dave Pax - Traverse City TSC				
Southwest	6/26/2019	MXE	11000	202249A	\$857,562.48	\$1,098,293.58	240,731.10	28.07%	*	4/15/2019		5/24/2019	0	C	Chris Jacobs - Kalamazoo TSC				
Southwest	6/11/2019	M	11016	M51802	\$613,378.07	\$618,817.12	5,439.05	0.89%		9/26/2018	10/26/2018	10/26/2018	0	M	Chris Jacobs - Kalamazoo TSC				
Superior	6/27/2019	STG	21021	125834A	\$1,418,689.72	\$1,403,253.71	(15,436.01)	-1.09%		5/14/2018	8/10/2018	8/30/2018	20	C	Steve Cadeau-Crystal Falls TSC				
Superior	6/27/2019	NH	22013	120318A	\$3,680,296.33	\$3,599,961.95	(80,334.38)	-2.18%		5/14/2018	9/7/2018	9/5/2018	-2	M	Steve Cadeau-Crystal Falls TSC				
Superior	6/10/2019	NH	27023	131811A	\$1,370,602.06	\$1,380,837.46	10,235.40	0.75%		5/16/2018	9/7/2018	7/24/2018	-44	M	Steve Cadeau-Crystal Falls TSC				
Superior	6/10/2019	ST	36000	202204A	\$480,000.00	\$480,000.01	0.01	0.00%		6/14/2018		7/16/2018	0	M	Steve Cadeau-Crystal Falls TSC				
Superior	6/27/2019	NH	36052	131802A	\$859,036.28	\$857,541.15	(1,495.13)	-0.17%		8/3/2018	10/31/2018	10/24/2018	-7	M	Steve Cadeau-Crystal Falls TSC				
University	6/27/2019	ST	47013	132988A	\$337,208.00	\$336,276.91	(931.09)	-0.28%		6/4/2018		6/15/2018	0	C	Erica Rowley - Tyme Engineering				
University	6/10/2019	MX	84900	129861A	\$1,675,175.19	\$1,692,969.06	17,793.87	1.06%		11/20/2017	12/31/2018	11/28/2018	-33	M	Jim Daavettila-Brighton TSC				
				Original		Final		Over/Under %											
				All MDOT	\$126,082,515.49	All MDOT Proj	\$124,400,093.55	-1.33%											
				MDOT/MDOT	\$29,252,705.47	MDOT Des.	\$29,140,023.02	-0.39%											
				MDOT/Cons.	\$96,829,810.02	Cons. Designed	\$95,260,070.53	-1.62%											

LOCAL

CONSTRUCTION PROJECTS FINALED IN JUNE 2019

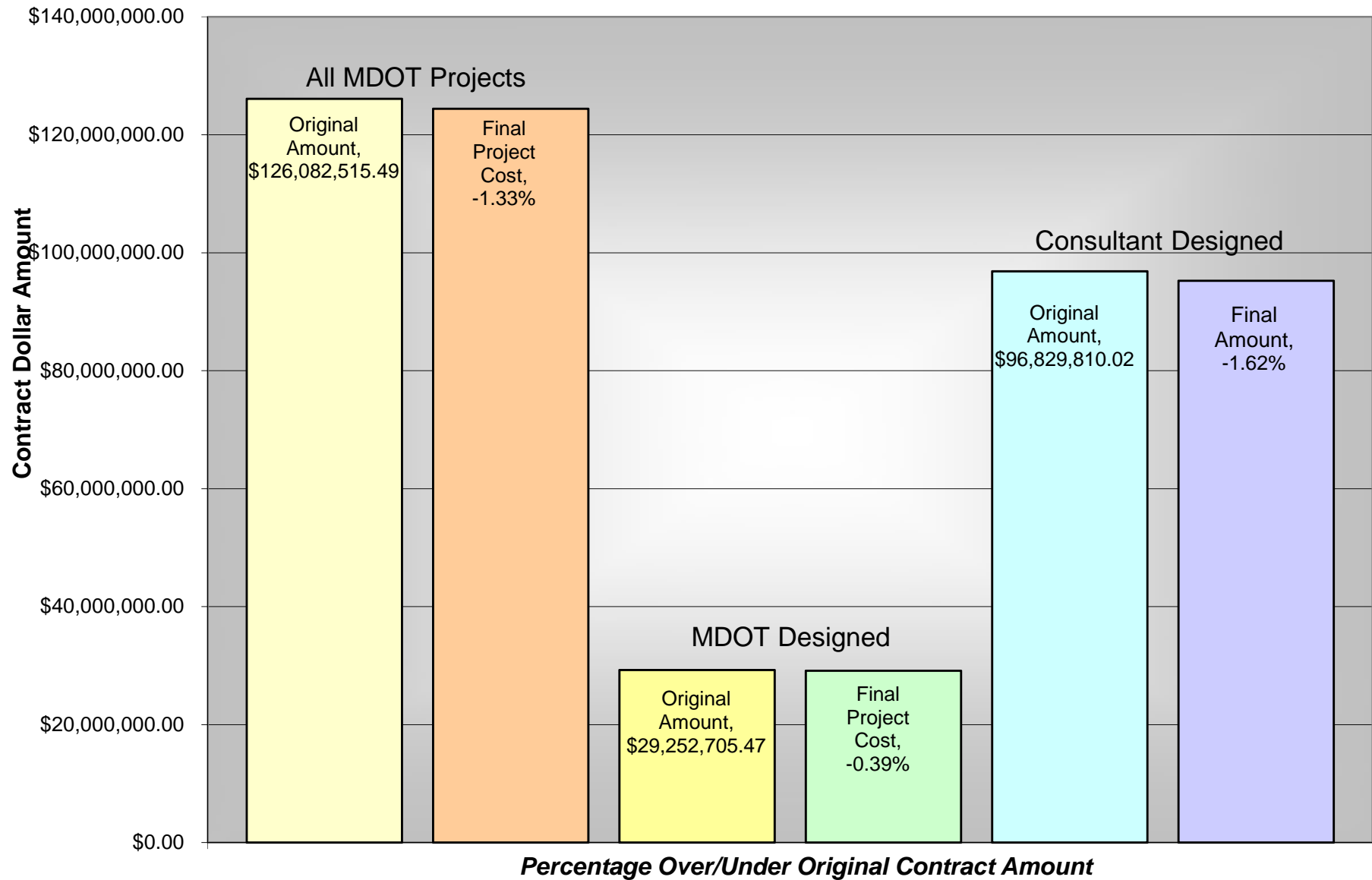
LOCAL PROJECTS FINALED THIS MONTH (27 Total)				TOTAL ORIGINAL CONTRACT AMOUNT	TOTAL FINAL CONTRACT AMOUNT	TOTAL INCREASE OR DECREASE	TOTAL PERCENT		# OF JOBS OVER 10%	#OF JOBS UNDER
				26,834,263.02	26,692,696.11	(141,566.91)	-0.53%		1	17
Date	Prefix	Control Section	Job Number	Original Contract Amount	Final Contract Amount	Increase or Decrease	Percent Over or Under	Jobs Over 10%	Date Work Started	Designed by
6/3/2019	EDF	38566	122427A	\$652,705.40	\$968,044.90	315,339.50	48.31%	*	4/18/2016	L
6/4/2019	STU	25049	121368A	\$3,824,861.30	\$3,754,530.04	(70,331.26)	-1.84%		7/13/2015	C
6/4/2019	STU	82000	132680A	\$539,743.24	\$591,585.23	51,841.99	9.60%		8/28/2017	L
6/5/2019	EDD	51000	201819A	\$217,321.54	\$212,713.24	(4,608.30)	-2.12%		6/5/2018	C
6/5/2019	STL	51000	129688A	\$540,884.83	\$534,303.80	(6,581.03)	-1.22%		6/5/2018	C
6/6/2019	BRT	53000	129325A	\$852,279.11	\$850,785.91	(1,493.20)	-0.18%		3/13/2018	C
6/11/2019	BRT	34000	129306A	\$997,913.62	\$1,014,668.32	16,754.70	1.68%		6/4/2018	C
6/13/2019	STU	58115	133097A	\$538,728.28	\$532,633.42	(6,094.86)	-1.13%		8/7/2017	L
6/14/2019	BO	73145	126561A	\$593,700.01	\$607,770.42	14,070.41	2.37%		12/4/2017	C
6/17/2019	STU	77147	133393A	\$251,855.03	\$220,928.56	(30,926.47)	-12.28%		6/21/2018	L
6/17/2019	STUL	77147	133391A	\$255,411.58	\$221,072.42	(34,339.16)	-13.44%		6/21/2018	L
6/17/2019	STUL	77147	133392A	\$539,485.31	\$546,106.30	6,620.99	1.23%		6/21/2018	L
6/18/2019	STU	63000	132513A	\$5,295,712.95	\$4,998,813.95	(296,899.00)	-5.61%		7/6/2017	L
6/19/2019	HSIP	81000	200513A	\$130,504.14	\$134,404.61	3,900.47	2.99%		7/19/2018	L
6/19/2019	STU	81000	201824A	\$477,884.74	\$477,769.08	(115.66)	-0.02%		7/19/2018	L
6/19/2019	STU	81000	201717A	\$208,250.82	\$176,341.62	(31,909.20)	-15.32%		6/18/2018	C
6/19/2019	CMG	81000	132794A	\$1,149,737.63	\$1,136,648.54	(13,089.09)	-1.14%		6/18/2018	C
6/19/2019	STU	14000	130776A	\$214,584.24	\$221,484.15	6,899.91	3.22%		8/7/2018	L
6/19/2019	STUL	81000	132523A	\$3,308,888.89	\$3,315,040.85	6,151.96	0.19%		10/3/2017	L
6/21/2019	STU	82000	200057A	\$713,754.22	\$756,412.17	42,657.95	5.98%		6/27/2018	C
6/21/2019	HSIP	13000	200916A	\$168,199.44	\$144,101.28	(24,098.16)	-14.33%		6/19/2018	L
6/25/2019	STUL	12000	201734A	\$374,859.31	\$326,981.26	(47,878.05)	-12.77%		6/4/2018	C
6/25/2019	CM	25402	130832A	\$975,454.00	\$937,514.90	(37,939.10)	-3.89%		5/22/2018	C
6/25/2019	TA	41081	123882A	\$2,765,060.13	\$2,763,870.78	(1,189.35)	-0.04%		3/25/2016	C
6/26/2019	TAUL	73404	128393A	\$616,246.06	\$637,091.48	20,845.42	3.38%		8/15/2016	C

LOCAL

CONSTRUCTION PROJECTS FINALED IN JUNE 2019

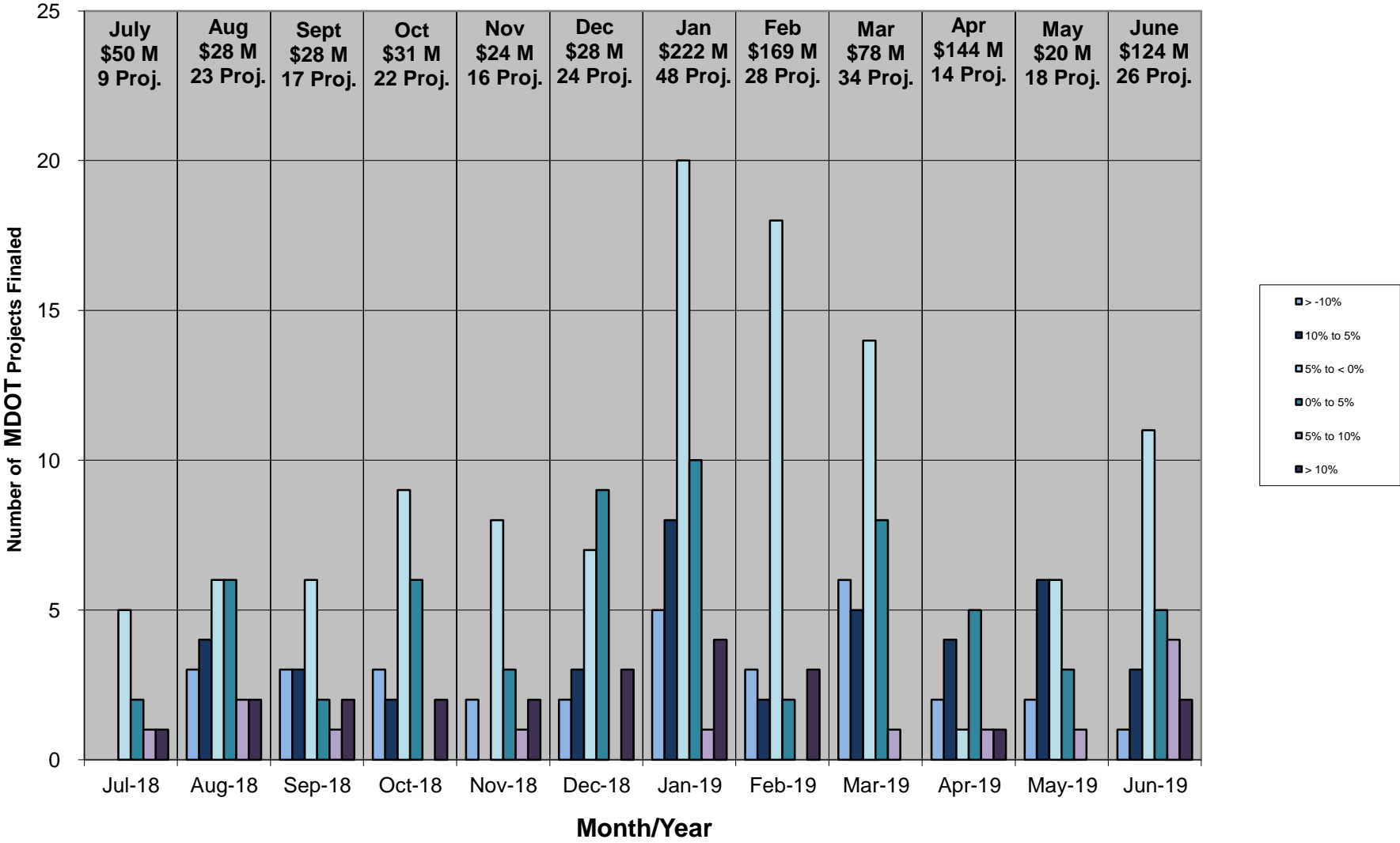
LOCAL PROJECTS FINALED THIS MONTH (27 Total)				TOTAL ORIGINAL CONTRACT AMOUNT	TOTAL FINAL CONTRACT AMOUNT	TOTAL INCREASE OR DECREASE	TOTAL PERCENT		# OF JOBS OVER 10%	#OF JOBS UNDER
				26,834,263.02	26,692,696.11	(141,566.91)	-0.53%		1	17
Date	Prefix	Control Section	Job Number	Original Contract Amount	Final Contract Amount	Increase or Decrease	Percent Over or Under	Jobs Over 10%	Date Work Started	Designed by
6/27/2019	STL	31000	202224A	\$260,063.00	\$256,541.28	(3,521.72)	-1.35%		6/13/2018	L
6/27/2019	STL	31000	123761A	\$370,174.20	\$354,537.60	(15,636.60)	-4.22%		6/13/2018	L

MDOT Construction Projects Finaled June 2019



MDOT Number of Projects Completed under/over Budget

(Final Contract Amount - Original Contract Amount = Over/Under Value)



DIRECTOR - DEPARTMENT OF TRANSPORTATION

AGENDA

June 20, 2019

CONTRACTS

1. HIGHWAYS - Participation for Local Agency Preliminary Engineering
Contract (2019-5307) between MDOT and the Midland County Road Commission will provide for participation in the following improvements:

Preliminary engineering activities for center left-turn lane work along Freeland Road from approximately 700 feet west of Sasse Road to approximately 700 feet east of Sasse Road, including paved shoulder, concrete curb and gutter, and transverse rumble strip installation work along Sasse Road.

Estimated Funds:

Federal Highway Administration Funds	\$25,180
Midland County Road Commission Funds	<u>\$25,180</u>
Total Funds	<u>\$50,360</u>

HRRR 56000 – 207254PE
Local Preliminary Engineering

2. PASSENGER TRANSPORTATION - Master Agreement
Master Agreement (2019-0573) between MDOT and AgeWell Services of West Michigan will set forth the terms and conditions that will govern all project authorizations to be issued for program years FY 2019 through FY 2021. The master agreement does not contain funding or project approvals. Each project authorization that is issued will contain the specific work to be performed, the funding source, and the term. The master agreement will be in effect from June 1, 2019, until the last obligation between the parties has been fulfilled.

Subject to the exercise of discretion in processing, I approve the above described contracts and authorize their award by the responsible management staff of MDOT in accordance with the December 14, 1983, resolution of the State Transportation Commission and the Director's delegation memorandum of February 11, 2019.

Respectfully submitted,

Signed copy on file

Paul C. Ajegba
Director

AGENDA

DEPARTMENT OF TRANSPORTATION

TRANSPORTATION and NATURAL RESOURCES COMMITTEE
STATE ADMINISTRATIVE BOARD

T&NR Meeting: June 18, 2019– Lake Superior Room,
1st Floor, Michigan Library and Historical Center, 11:00 AM
State Administrative Board Meeting: June 25, 2019 – Lake Superior Room,
1st Floor, Michigan Library and Historical Center, 11:00 AM

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This agenda is for general informational purposes only. At its discretion, the Transportation and Natural Resources Committee may revise this agenda and may take up other issues at the meeting.

CONTRACT PRE-APPROVAL

1. HIGHWAYS – Design Services
Contract (2019-0610) between MDOT and Tetra Tech of Michigan, P.C., will provide for design services to be performed for the hot mix asphalt (HMA) milling and two-course HMA overlay, joint repairs, drainage improvements, and guardrail upgrades on M-53 from Deanville Road to the south city limits of Marlette, in Lapeer County (CS 44032 - JN 130021PE). The work items will include performing design surveys; preparing required plans, typical cross-sections, details, and specifications; computing and verifying all plan quantities; and preparing staging plans and special provisions for maintaining traffic during construction. The contract will be in effect from the date of award through December 4, 2020. The contract amount will not exceed \$550,620.14. Source of Funds: 100% State Restricted Trunkline Funds.

CONTRACTS

2. HIGHWAYS (Development Services) – License Agreement
Tract 1539, Control Section 63174, Parcel 309, Part A

The subject tract is located in the City of Auburn Hills, Oakland County, Michigan, and contains approximately 33.43 acres within MDOT right-of-way along the M-59 and I-75 interchange. The license was appraised by Gerard Lacey on February 13, 2019, at \$72,000 per year. The appraisal was reviewed by Brian Walsh on March 4, 2019, at the amount of \$72,000 per year. The tract was approved for licensing by Lori Crysler, Program and Property Management Unit Supervisor, Development Services Division, on March 5, 2019, for \$72,000 per year. Mahindra Automotive Group North America, Inc., has submitted a signed Excess Property License Agreement. The license will be in effect from July 1, 2019, through June 30, 2024. The license amount will be \$360,000. The Bureau of Development has determined that the requested license agreement can be granted without inhibiting operation and maintenance needs, with concurrence from the Metro Region. This is a revenue contract.

3. HIGHWAYS – Design Services

Contract (2019-0612) between MDOT and CDM Smith Michigan, Inc., will provide for design services to be performed for the crushing and shaping of the existing two-lane trunkline with center left-turn lane widening from 200 feet south of Vance Road southerly to approximately 2,600 feet south of Blair Town Hall Road, including the crushing and shaping of the remaining existing trunkline to M-113 and the design of a single-lane roundabout with geometric improvements at the intersection of M-37 and Blair Town Hall Road, Traverse City County (CS 28051 - JNs 128552PE and 129932PE). The work items will include preparing required plans, typical cross-sections, details, and specifications; computing and verifying all plan quantities; and preparing staging plans and special provisions for maintaining traffic during construction. The contract will be in effect from the date of award through May 2, 2021. The contract amount will be \$813,433.39. Source of Funds: 81.85% Federal Highway Administration Funds and 18.15% State Restricted Trunkline Funds.

4. *HIGHWAYS – Intelligent Transportation System Services

Contract (2019-0790) between MDOT and Integral Blue, LLC, will provide for Intelligent Transportation System (ITS) infrastructure and network maintenance services to be performed for all seven MDOT Regions, the Blue Water Bridge, and the International Bridge. The work items will include maintenance of ITS devices and communications equipment, preventive maintenance, and routine and emergency maintenance, along with coordination of these services with MDOT offices and other contractors. The contract will be in effect from July 1, 2019, through June 30, 2020. The contract includes the funding for the first year of the ITS services; it will be amended each year to add that year's funding. The contract amount for the Year 1 services will be \$6,273,713.40. Source of Funds: 81.85% Federal Highway Administration Funds and 18.15% State Restricted Trunkline Funds.

BID LETTING PRE-APPROVALS

STATE PROJECTS

5. Letting of June 28, 2019 Prequalification Level:
Letting Call: 1906 916 **\$4,216,000.00**
Project: ST 33011-205192
Local Agreement: 19-5303
Start Date: July 8, 2019
Completion Date: November 15, 2019

2.84 mi of hot mix asphalt surfacing, concrete pavement repair, concrete curb and gutter and drainage structure upgrades on M-99 from Edgewood Blvd. north to 500 feet south of Barnes Rd. in the city of Lansing, Ingham County. This project includes a 5-year material and workmanship and a 3-year material and workmanship pavement warranties.

4.00 % DBE participation required

6. Letting of July 12, 2019 Prequalification Level:
Letting Call: 1907 014 **\$988,000.00**
Project: M 63000-201818
Local Agreement:
Start Date: 10 days after award
Completion Date: October 28, 2022

0.06 mi of hot mix asphalt reconstruction, concrete curb and gutter, earthwork, aggregate base and bridge removal on Trowbridge Court over GTW Railroad in the city of Bloomfield Hills, Oakland County. A mandatory pre-bid meeting will be held at 1:00 p.m. on Tuesday, June 18, 2019, at the Oakland Transportation Service Center located at 800 Vanguard Drive, Pontiac, Michigan. All prospective bidders must attend in order to be considered eligible to bid.

0.00 % DBE participation required

7. Letting of July 12, 2019 Prequalification Level:
Letting Call: 1907 016 **\$695,000.00**
Project: ST 24000-200005
Local Agreement:
Start Date: August 5, 2019
Completion Date: October 31, 2020

Construction of wetland mitigation site on Banwell Road at Smith Road in the southeast quadrant, Emmet County.

4.00 % DBE participation required

LOCAL PROJECTS

8. Letting of June 28, 2019 Prequalification Level:
Letting Call: 1906 901 **\$27,823,000.00**
Project: TIGR 25000-200906
Local Agreement: 19-5308
Start Date: 10 days after award
Completion Date: August 27, 2021

5.00 mi of hot mix asphalt reconstruction, concrete pavement, curb, gutter, sidewalk and ramps, earth excavation, aggregate base, water main, storm sewer, signing, bridge reconstruction with 21-inch prestressed concrete box beams, steel piles, cofferdams and pavement markings on Dupont Street from University Avenue to Copeman Street and from Pasadena Avenue to Bishop Avenue and on Atherton Road from Van Slyke Road to Dort Highway (M-54) over Carman Creek in the city of Flint, Genesee County. This is a Local Agency project.

5.00 % DBE participation required

9. Letting of June 28, 2019 Prequalification Level:
Letting Call: 1906 903 **\$701,000.00**
Project: STUL 11000-130790
Local Agreement: 19-5289
Start Date: 10 days after award
Completion Date: October 30, 2019

0.93 mi of hot mix asphalt cold milling and resurfacing, joint and crack repairs and pavement markings on Napier Avenue from St. Joseph River to Colfax Avenue, Berrien County. This is a Local Agency project.

3.00 % DBE participation required

10. Letting of June 28, 2019 Prequalification Level:
Letting Call: 1906 904 **\$3,057,000.00**
Project: NH 41000-130612
Local Agreement: 19-5275
Start Date: 10 days after award
Completion Date: October 31, 2021

0.27 mi of hot mix asphalt reconstruction, concrete curb and gutter, sidewalk, sidewalk ramps, driveway, storm sewer, water main and pavement markings on Division Avenue from Wealthy Street to Cherry Street in the city of Grand Rapids, Kent County. This is a Local Agency project.

4.00 % DBE participation required

- | | | |
|-----|---|--|
| 11. | Letting of June 28, 2019
Letting Call: 1906 905
Project: STL 41000-130692
Local Agreement: 19-5293
Start Date: July 1, 2019
Completion Date: September 14, 2019 | Prequalification Level:
\$1,342,000.00 |
| | 4.00 mi of hot mix asphalt crushing, shaping and resurfacing, guardrail and pavement markings on 7 Mile Road NW from Fruit Ridge Avenue to Alpine Avenue. Kent County. This is a Local Agency project. | |
| | 3.00 % DBE participation required | |
| 12. | Letting of June 28, 2019
Letting Call: 1906 907
Project: TAL 16000-200053
Local Agreement: 19-5280
Start Date: 10 days after award
Completion Date: October 4, 2019 | Prequalification Level:
\$625,000.00 |
| | 1.83 mi of hot mix asphalt shared use path includes grading, earthwork, retaining wall, viewing platform and slope restoration on along West Burt Lake Road to Riggsville Road, Cheboygan County. This is a Local Agency project. | |
| | 4.00 % DBE participation required | |
| 13. | Letting of June 28, 2019
Letting Call: 1906 908
Project: STUL 52000-133036
Local Agreement: 19-5277
Start Date: August 5, 2019
Completion Date: October 31, 2019 | Prequalification Level:
\$506,000.00 |
| | 0.91 mi of hot mix asphalt cold milling and resurfacing, adjust drainage structures, concrete sidewalk ramps, slope restoration and pavement markings on various routes, Marquette County. This is a Local Agency project. | |
| | 0.00 % DBE participation required | |

14. Letting of June 28, 2019
Letting Call: 1906 909
Project: STU 82000-203503
Local Agreement: 19-5276
Start Date: 10 days after award
Completion Date: September 30, 2019
- Prequalification Level:
\$1,341,000.00

1.50 mi of hot mix asphalt cold milling and resurfacing, intermittent curb repair, concrete base repair and ADA ramps on Beech Daly Road from Brest Road to Wick Road in the city of Taylor, Wayne County. This is a Local Agency project.

3.00 % DBE participation required

15. Letting of June 28, 2019
Letting Call: 1906 910
Project: BRT 64000-133055
Local Agreement: 19-5274
Start Date: 10 days after award
Completion Date: May 29, 2020
- Prequalification Level:
\$1,803,000.00

Bridge reconstruction with 54-inch prestressed concrete beams, cofferdams, piles, sheet piling, hot mix asphalt paving, earthwork, drainage, riprap and approach work on Shelby Road over Stoney Creek, Oceana County. This is a Local Agency project.

3.00 % DBE participation required

16. Letting of June 28, 2019
Letting Call: 1906 912
Project: NH 82000-205935, ETC
Local Agreement: 19-5309
Start Date: 10 days after award
Completion Date: September 30, 2020
- Prequalification Level:
\$11,902,000.00

15.82 mi of hot mix asphalt cold milling and resurfacing, concrete curb and gutter, sidewalk, sidewalk ramps, drainage and pavement markings on various routes in the city of Detroit, Wayne County. This is a Local Agency project.

4.00 % DBE participation required

17. Letting of June 28, 2019
Letting Call: 1906 915
Project: STU 82000-205484
Local Agreement: 19-5294
Start Date: 10 days after award
Completion Date: 60 Calendar Days

Prequalification Level:
\$551,000.00

0.52 mi of hot mix asphalt cold milling and resurfacing, concrete pavement, curb, gutter, sidewalk and ramps, storm sewer and pavement markings on Military Road from Cherry Hill Street to Outer Drive in the city of Dearborn, Wayne County. This is a Local Agency project.

3.00 % DBE participation required

18. Letting of July 10, 2019
Letting Call: 1907 701
Project: STU 82000-203623
Local Agreement: 19-5208
Start Date: 10 days after award
Completion Date: November 15, 2019

Prequalification Level:
\$1,199,000.00

Design-Build for foundation stabilization repair for piers 2, 4, 6, 8, and 10 on Grosse Ile Parkway Bridge, Wayne County. This is a Local Agency project. Only short-listed contractors are eligible to bid on this project.

0.00 % DBE participation required

19. Letting of July 12, 2019
Letting Call: 1907 001
Project: STL 46555-129631
Local Agreement: 19-5249
Start Date: 10 days after award
Completion Date: November 1, 2019

Prequalification Level:
\$1,131,000.00

7.49 mi of hot mix asphalt overlay, shoulders and pavement markings on Ridge Highway from M-50 to the Lenawee County Line, Lenawee County. This is a Local Agency project.

3.00 % DBE participation required

20. Letting of July 12, 2019
Letting Call: 1907 003
Project: STL 13000-205424
Local Agreement: 19-5250
Start Date: October 1, 2019
Completion Date: August 21, 2020
- Prequalification Level:
\$699,000.00
- 1.30 mi of hot mix asphalt crushing, shaping and resurfacing, aggregate base, shoulders, guardrail, signing and pavement markings on Partello Road from 19 Mile Road to southwest of 20 Mile Road, Calhoun County. This is a Local Agency project.
- 3.00 % DBE participation required
21. Letting of July 12, 2019
Letting Call: 1907 005
Project: STU 63000-203636-2 , ETC
Local Agreement: 19-5151
Start Date: August 16, 2019
Completion Date: September 25, 2020
- Prequalification Level:
\$3,631,000.00
- 1.79 mi of hot mix asphalt surface removal and resurfacing, shared use path, concrete curb and gutter, sidewalk, sidewalk ramp, culverts, sewer drainage, modular block retaining wall, concrete barrier wall, ditching, concrete pavement repairs, guardrail and pavement markings on southbound Northwestern Highway Service Drive from Civic Center Drive to 9 Mile Road in the city of Southfield, Oakland County. This is a Local Agency project.
- 5.00 % DBE participation required
22. Letting of July 12, 2019
Letting Call: 1907 006
Project: STL 74555-130151
Local Agreement: 19-5319
Start Date: 10 days after award
Completion Date: July 17, 2020
- Prequalification Level:
\$1,394,000.00
- 10.53 mi of hot mix asphalt overlay, aggregate shoulders and pavement markings on Ruth Road from the north village limit of Deckerville north to the North Huron county line, Sanilac County. This is a Local Agency project.
- 0.00 % DBE participation required

23. Letting of July 12, 2019
Letting Call: 1907 007
Project: MCS 73000-129291
Local Agreement: 19-5295
Start Date: 10 days after award
Completion Date: June 20, 2020

Prequalification Level:
\$1,324,000.00

Bridge removal and replacement with prestressed concrete I-beams, hot mix asphalt surfacing and guardrail on Fergus Road over Fairchild Creek, Saginaw County. This is a Local Agency project.

0.00 % DBE participation required

24. Letting of July 12, 2019
Letting Call: 1907 008
Project: HSIP 50031-203267
Local Agreement: 19-5317
Start Date: November 1, 2019
Completion Date: July 15, 2020

Prequalification Level:
\$765,000.00

Installation of reflectorized backplates, tethers and signal modernization on M-97 at various intersections, Macomb County. This is a Local Agency project.

0.00 % DBE participation required

25. Letting of July 12, 2019
Letting Call: 1907 017
Project: TA 70000-201121
Local Agreement: 19-5292
Start Date: 10 days after award
Completion Date: September 19, 2021

Prequalification Level:
\$2,011,000.00

1.60 mi of hot mix asphalt shared use path, earthwork, restoration and pavement markings along Terra Verde Course from 120th Avenue to 112th Avenue, Ottawa County. This is a Local Agency project.

5.00 % DBE participation required

26. Letting of July 12, 2019
Letting Call: 1907 018
Project: TA 82000-203501, ETC
Local Agreement: 19-5312
Start Date: 10 days after award
Completion Date: November 15, 2019

Prequalification Level:
\$687,000.00

0.56 mi of hot mix asphalt cold milling and resurfacing, concrete base course patching, full depth pavement repair, curb, gutter, sidewalk and ramps, signing, drainage, landscaping and pavement markings on Cadieux Road from Kercheval Avenue to Mack Avenue in the cities of Grosse Pointe Park and Grosse Pointe, Wayne County. This is a Local Agency project.

5.00 % DBE participation required

27. Letting of July 12, 2019
Letting Call: 1907 019
Project: STL 20555-130318
Local Agreement: 19-5300
Start Date: 10 days after award
Completion Date: October 18, 2019

Prequalification Level:
\$594,000.00

3.57 mi of hot mix asphalt resurfacing on North Old 27 from Hulbert Road north to West Mt. Frederic Road, Crawford County. This is a Local Agency project.

0.00 % DBE participation required

PURCHASING

28. Highway Hazard Recovery, \$200,000.00 Amendment
Capac, MI \$1,117,890.00 New Total
FY 19-20 100% Restricted Funds
State Trunkline Maintenance.

Additional funds for increased services and to exercise 90-day extension per Section 25 Transition Responsibilities. Carcass removal services on State Trunklines. We utilize them and pay them on an as-needed basis. The vendor invoices us, and we pay per carcass removal.

29. United Resource , LLC \$1,115,000.00 Total
Livonia, MI FY 19-21 100% Restricted Funds
State Trunkline Maintenance

This is a two (2) year contract with three (3) one-year options for drainage system cleaning for Michigan Department of Transportation (MDOT), Taylor Transportation Center (TSC), Metro and Wayne County.

30. Carrier & Gable, Inc \$500,000.00 Amendment
\$850,000.00 New Total

Funds FY17-20, State Trunkline Maintenance, additional funds, for as needed Statewide purchase of Attenuators – Truck and Trailer Mounted for The Office of Administrative Services, Fleet Administration & Operations.

The approval by the State Administrative Board of these contracts does not constitute the award of same. The award of contracts shall be made at the discretion of the Director-Department of Transportation when the aforementioned requirements have been met. Subject to exercise of that discretion, I approve the contracts described in this agenda and authorize their award by the responsible management staff of MDOT to the extent authorized by, and in accordance with, the December 14, 1983, resolution of the State Transportation Commission and the Director's delegation memorandum of February 11, 2019.

Respectfully submitted,

Signed copy on file (6.17.19)

Paul C. Ajegba
Director

MICHIGAN DEPARTMENT OF TRANSPORTATION



2020-2024 FIVE-YEAR TRANSPORTATION PROGRAM

Draft presented to the State Transportation Commission on July 18, 2019



 **MDOT**
Michigan Department of Transportation

Dear Reader:

I present to you the 2020-2024 Five-Year Transportation Program, a detailed accounting of the Michigan Department of Transportation's (MDOT) stewardship of highway, bridge, public transit, rail, aviation, marine, and nonmotorized programs. This transportation program represents \$12.3 billion in multi-modal transportation investments during the next five-year timeframe.

The 2020-2024 Five-Year Transportation Program utilizes all available federal and state funding in order to progress toward the vision and goals set forth in the 2040 MI Transportation Plan. As funding levels continue to lag behind the overall needs across all modes of transportation, we will continue to be strategic in our investment decisions. Future investments will also need to take into account rapidly changing vehicle and infrastructure technologies that may alter the transportation system as we know it.

MDOT annually updates the Five-Year Transportation Program, which provides information on multi-modal revenues available, expected investments, performance measures, and a list of planned road and bridge projects. Projects presented in this program are within MDOT's jurisdiction, which include all state-owned roads/highways with an I, M or US designation (for example: I-94, M-21, and US-23). For the other modes presented (public transportation and aviation), the majority of the assets are owned, managed and operated by other entities. Therefore, the federal and state funding represented in this document may be only a portion of the total investment.

MDOT strives to deliver the program in the most effective and efficient way possible by providing the highest quality integrated transportation services for economic benefit and improved quality of life in the safest and most efficient way possible. The department is working diligently to continue to be a progressive and innovative agency with an exceptional workforce that inspires public confidence. To learn more about MDOT policies and programs, please visit the department's website at www.Michigan.gov/MDOT.

Thank you for your interest in the Five-Year Transportation Program.



Sincerely,

A handwritten signature in black ink that reads "Paul C. Ajegba, P.E.". The signature is fluid and cursive, with the first name "Paul" being the most prominent.

*Paul C. Ajegba, P.E.
Director*

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Introduction

The purpose of the MDOT Five-Year Transportation Program (5YTP) is to present MDOT's investments across all modes as early in the planning process as possible in order to support successful program delivery, encourage local coordination, and guarantee opportunities for meaningful public input.

The 5YTP serves as an essential communication and public relations tool for everyone – those within the department, stakeholders, the State Transportation Commission (STC), and the public. It reflects the priorities of the department, identifies funding available, and establishes the timetable for project delivery. It is truly an integral part of this organization and provides the information pipeline for our business from project development through to delivery.

This document provides information on planned investments for all components of the transportation network for which MDOT is responsible, including highways, bridges, bus, rail, aviation, marine, and nonmotorized transportation. This document is created in alignment with established State Long-Range Transportation Plan (SLRTP) and STC goals established to ensure the preservation of the transportation network to provide a safe and connected system for Michigan's citizens, as required.

Five-Year Transportation Program Process

The development of the 5YTP is a rolling, yearlong, multi-stage process as shown in the following flowchart. Each year, the first year of projects is implemented, a new year is added, and program and project adjustments are made to the other years, as required.

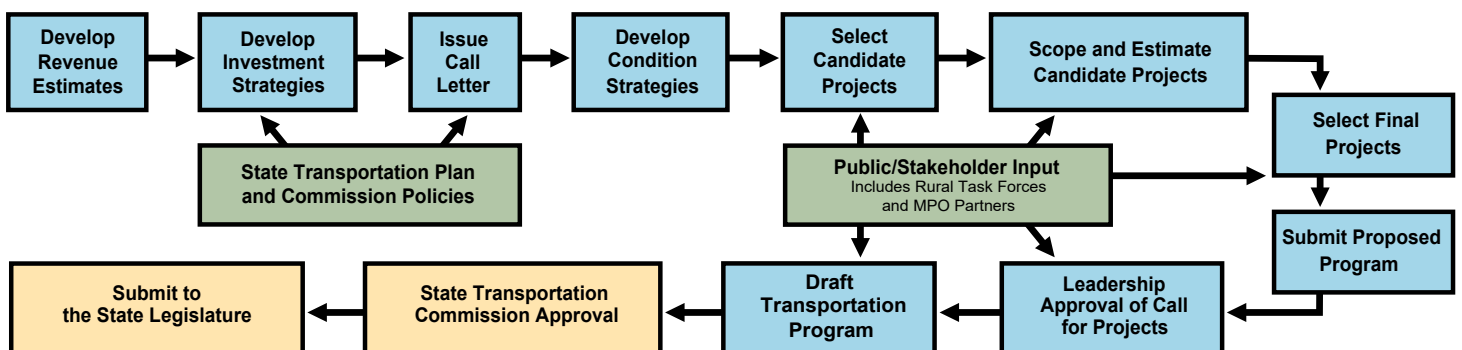
Develop Revenue Estimates

At the beginning of the process for developing the new 5YTP, the Bureau of Transportation Planning monitors federal and state revenues in order to estimate the level of funding MDOT may receive in the future.

Federal revenues are based on the current federal transportation authorization bill, the Fixing America's Surface Transportation (FAST) Act. State revenues are based on estimated gas tax and registration fee receipts, which are then projected using a long-range revenue forecasting model. MDOT's revenue estimates and projections are shared with the Michigan Department of Treasury and consensus is reached.

Develop Investment Strategies

Based on the revenue consensus, staff work with department leadership from across the modes, including passenger transportation, rail, aviation, bridge, and highway, to develop a strategy for investing those revenues in alignment with condition, performance, and



safety goals established by the department. For roads and bridges, the overall investment strategy defines how much funding will be allocated to each program category in order to achieve those goals. The department monitors each program category throughout the year to ensure targets are adhered to in order to maintain fiscal constraint.

The major program categories are listed below and comprise the majority of MDOT's projects. Construction projects may contain funding from multiple programs within the same project. While the investment strategy for the highway program includes all program categories, the project list contained within this document is limited to the following:

- Big Bridge Program
- Bridge Preservation
- Bridge Replacement
- Repair and Rebuild Roads
- New Roads
- Trunkline Modernization
- Capacity Improvement

The project list contained within this document covers the portion of the highway program that MDOT delivers and does not include a list of projects or programs that are controlled by local agencies, such as transit agencies or county road commissions, or a full listing of projects from other modes, such as aviation, passenger transportation, rail, or marine projects. Please note that any of the above highway program category projects may also include components that support the safety and mobility of pedestrians or bicyclists even if the project list contained within this document does not describe all details of the construction project. If you have questions about specific projects, please contact the region engineer listed on page 77.



Issue Highway Call for Projects

In order to identify projects for this document, MDOT issues a highway Call for Projects (CFP) annually, with instructions to all MDOT regions and program managers that include key areas of emphasis, strategic objectives, and target funding levels. The CFP process guides the technical side of project identification and aligns the department with the strategic direction set by the SLRTP and STC.

During this time, candidate projects for the fifth year of this document are scoped and estimated, and public input is solicited throughout the CFP process. The proposed projects are then reviewed by CFP subcommittees for consistency with statewide goals and policies, constraint to available revenue, and consistency with instructions in the CFP. Projects submitted and approved during a "call" become the basis for the project list contained herein. Highway projects contained in this document were captured in the Fiscal Year (FY) 2024 CFP and other previous calls, and include projects planned for the next five years and constrained to available resources.

Stakeholder Engagement

The 5YTP offers the public and interested stakeholders the opportunity to engage in discussions about upcoming road and bridge projects. At the candidate identification stage at the region level (CFP), the opportunity for meaningful stakeholder engagement is at its highest. It is best to contact the local region planner for information on how to collaborate with MDOT on upcoming road and bridge projects.

As a project progresses along the following timeline, the likelihood of making significant changes decreases. At the point of scope verification, budgets are set and are not easily increased. Transportation projects are often many years in the making, so it is important that public participation and stakeholder engagement happens as early as possible in the transportation planning process.

The 5YTP has been used to engage in continuous and interactive dialogue with the users of the state transportation system for the past two decades. The 5YTP is shared with local agencies, stakeholders, and the public by staff from MDOT's seven region offices (Bay, Grand, Metro, North, Southwest, Superior, and University), the 22 Transportation Service Centers (TSCs), and MDOT's

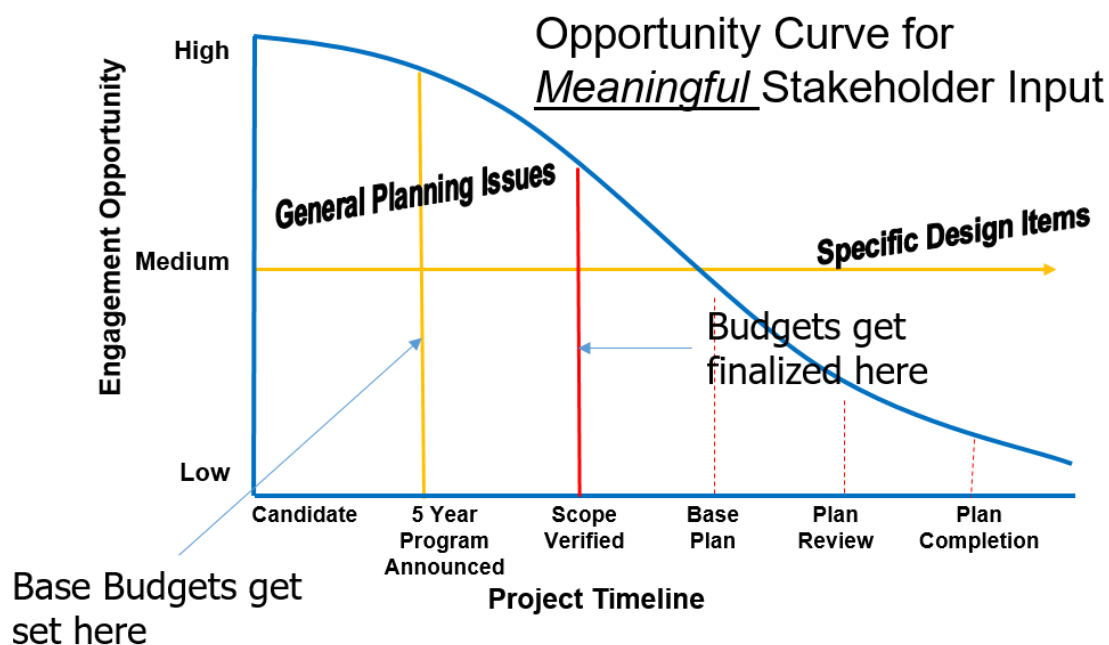
statewide planning staff. MDOT staff also discuss projects and coordinate with other state agencies, including the Michigan Department of Natural Resources (MDNR), the Michigan Economic Development Corp. (MEDC), and the Michigan State Police (MSP).

Document Development

While the project list is reviewed for accuracy in the spring, the full draft document is being prepared to be presented to the STC by mid-summer. Once the draft is approved, it is posted to MDOT's public website with an accompanying interactive map for a 30-day public comment period to provide an additional opportunity to gain public and stakeholder input. This posting is announced with a news release, social media posts, and via public e-mailing lists at both the state and local levels.

Final Document

A final draft is presented to the STC in the fall, during which time questions from the commissioners and the general public are addressed. Once approved by the STC, the document is considered final and is published to the MDOT 5YTP website, along with an interactive map of highway projects. The final document is submitted to the state Legislature shortly thereafter.



Infrastructure, Mobility and Innovation

The state of Michigan has always been a pioneer in transportation and automotive innovation. This section of the Five-Year Transportation Program highlights connected and automated vehicle technologies, describes public demand for new mobility and active transportation options, and includes updates on major infrastructure projects statewide.

Infrastructure

I-75 Modernization Project in Oakland County

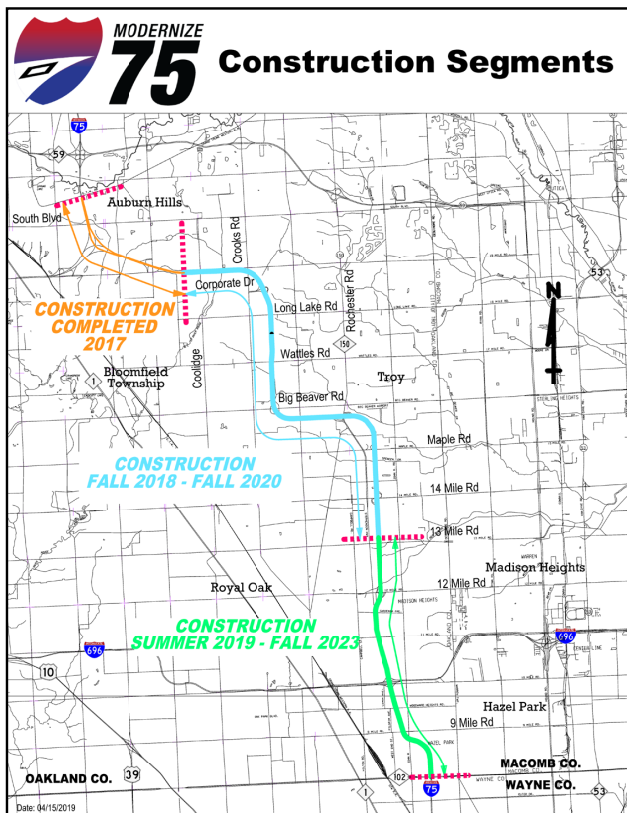
The I-75 modernization project focuses on a 17.7-mile section from north of M-102 (8 Mile Road) to north of South Boulevard, which includes 11 interchanges and 16

road crossings through six communities within Oakland County. It carries daily traffic volumes ranging from 103,000 to 178,000 vehicles per day in the project area.

Three miles to the east and west of I-75 within the project limits, this corridor supports 23,000 businesses and more than 339,000 employees.

The project began construction in 2016 with a design-build (DB) segment from north of Coolidge Road to north of South Boulevard and included modernizing the Square Lake Road interchange with modern right on and off ramps. This modification improved operations and safety at the interchange, along with the entire I-75 corridor, reducing potential for sideswipe and rear-end crashes by adding capacity and improving merge/weave traffic movements in the area. Additional improvements included the reconstruction of freeway lanes, replacement of bridges with pedestrian accommodations, trees and landscaping, community developed aesthetic enhancements, drainage, and geometric improvements. This first segment opened to traffic on Sept. 1, 2017.

MDOT considered various delivery alternatives to speed up construction and minimize stakeholder inconvenience that, under the prior financial plans, extended construction through 2034. Through consideration of a variety of construction delivery methods, financial analysis and consultation, MDOT decided to advance the remaining project using a two-segment approach, both occurring concurrently (see adjacent map). Segment Two, extending from Coolidge Road to 13 Mile Road, is being delivered as the largest DB project, three times the size of the first completed segment. The last segment (Segment Three), extending from 13 Mile Road to M-102 (8 Mile Road), is planned as a design, build, finance and maintain (DBFM) project. Both alternative delivery options will allow MDOT to realize full economic benefits for needed modernized infrastructure more than a decade sooner, completing major construction by 2023. This reduces construction time and disruption to stakeholders, while realizing positive economic benefits 10 years sooner than originally planned. It will also allow for innovation, with construction and lifecycle efficiencies (e.g.,



economies of scale, better coordination of activities, and reduction in mobilization costs), and allows for the transfer of long-term risk and maintenance activities, while taking advantage of the historically low cost of private financing.

Construction of Segment Two began in late fall 2018 and is currently in construction. It is expected to be completed in fall 2020. Pre-work for Segment Three is expected to begin in late summer 2019 and continue until 2023.

I-94 Modernization Project in Detroit

The I-94 Modernization Project will bring approximately seven miles of I-94 in the City of Detroit up to current safety and design standards. It involves the complete redesign and reconstruction of I-94 from I-96 to Connor Avenue. The project includes the addition of one lane in each direction to relieve congestion, replacement of 67 bridges along the corridor and at the interchanges, wider shoulders, new drainage system, the lengthening of entrance and

exit ramps and other improvements to increase safety and provide greater mobility for motorized and nonmotorized transportation as well as for pedestrians.

The development and construction of several I-94 advanced bridges is ongoing. The replacement of bridges over I-94 at Woodward Avenue, Trumbull Street, Van Dyke Avenue, Gratiot Avenue, and Chene Street have been completed. Bridges at Brush Street, Concord Street and French Road will be under construction during the 2019 construction season. Bridges at Second Avenue, Mt. Elliott Street, East Grand Boulevard, and Milwaukee Avenue over I-75 will be constructed in 2020. Bridges at Cass Avenue, Grand River Avenue, Burns Street, and Frontenac Street will be constructed in 2021. Third Street will be removed in 2021.

In 2022, MDOT will be replacing two Conrail Railroad bridges along the corridor. Active transportation and demand management (ATDM) plans are being developed along Gratiot and Michigan avenues and on I-94 to more

smoothly accommodate increased traffic flow during the reconstruction of I-94. Right of way acquisition is currently ongoing along the corridor.

MDOT has been seeking comments on the project through an extensive public engagement plan and is currently studying modifications to the project in response to stakeholder comments. The study is called a Supplemental Environment Impact Statement (SEIS). As part of the SEIS process, MDOT will conduct a public hearing in 2019 and will complete the SEIS process



in 2020. If the SEIS is approved by the Federal Highway Administration (FHWA), MDOT can then proceed with design, right-of-way acquisition, and construction of the modified portions of the project. Immediately following the approval of the SEIS, MDOT will begin the final design of the section of I-94 from Conner Avenue to Chene Street, along with modifications to the Dequindre Road bridge. Major construction of that work on I-94 will begin in 2024.

Gordie Howe International Bridge Construction

The Gordie Howe International Bridge (GHIB) project is a new freeway-to-freeway border crossing system between Detroit, Michigan, and Windsor, Ontario, that will improve the flow of international trade between the United States and Canada at the busiest border crossing between the two countries.

The project has three primary elements: a new Detroit River crossing (bridge), new state-of-the-art border inspection areas on each side of the river for the U.S. and Canadian border services agencies (plazas), and direct connections to highway systems in each country (I-75 in the United States and Highway 401 in Canada via the new \$1.4 billion Rt. Hon. Herb Gray Parkway). The bridge structure will include a dedicated multi-use path to accommodate pedestrians and cyclists.

On June 15, 2012, an interlocal Crossing Agreement was signed by then-Gov. Rick Snyder and Canadian officials to provide a framework for a Canadian Crossing Authority, now known as the Windsor-Detroit Bridge Authority (WDBA), to implement the new crossing under the oversight of a jointly established International Authority. Design, construction, financing, operation and maintenance of the GHIB will be performed by a private entity through a public-private partnership (P3) agreement.

In July 2015, the WDBA-managed procurement process for the design, construction, operation and maintenance

of the new bridge was launched with the issuance of a request for qualifications for the P3 concessionaire. The WDBA announced its Preferred Proponent in July 2018 as planned, selecting Bridging North America (BNA).

GORDIE HOWE INTERNATIONAL BRIDGE



Almost all pre-construction activities in Canada, including land acquisition, demolition and the construction of the parkway that will connect Highway 401 to the GHIB, have been completed. The WDBA has retained numerous consultants, including an Owner's Engineer in April 2018, to support them through design review, providing technical advice and monitoring and overseeing the construction activities of the private-sector partner through inspections, compliance reviews and audits. MDOT has retained land acquisition, demolition, and environmental consultants to assist its efforts. Property acquisition for right-of-way located in the GHIB footprint on the U.S. side is nearly complete. Utility relocations to accommodate the new U.S. Port of Entry are well underway, including the relocation and replacement of several siphons and combined sewer crossings as part of the I-75 inlay project.

Construction began in October 2018 and is expected to take six years to complete, including turnover and commissioning, before opening to traffic. Implementation of this project will be complex, lengthy, and must comply with the Crossing Agreement between Michigan and Canada, and the Project Agreement between WDBA and BNA. The GHIB will be publicly

owned by the State of Michigan and the Government of Canada, with WDBA overseeing the work of the P3, managing the concession agreement and payments, and setting and collecting tolls.

Lafayette Bascule Bridge Replacement

The Lafayette Bascule Bridge was constructed in 1938 and carries traffic on M-13/M-84 (Lafayette Avenue) over the east channel of the Saginaw River in Bay City. The 456-foot structure is comprised of two approach spans and a 185-foot rolling lift span, allowing for navigation of maritime traffic. More than 8 million vehicles travel across this structure every year, with an average of 443 bridge openings per year during the navigational season.

At nearly 80 years old, the Lafayette Bascule Bridge is considered to be in poor condition according to the superstructure rating. A comprehensive feasibility study was performed in 2013 to evaluate superstructure repair versus replacing the structure. Replacement was recommended due to the scour criticality of the existing structure, the age of the existing substructure, and constructability issues requiring specialized and highly complex repairs.

The proposed cross section of the new structure will consist of two 12-foot driving lanes. Pedestrians will use standard 5-foot-wide sidewalk on the bridge's north side, on the south side an 8-foot-wide sidewalk will be provided. A full detour will be required while the existing bridge is demolished and the new bridge is constructed. It is estimated that this detour will be in effect for 24 months.

This project has been selected to use the construction manager/general contractor (CM/GC) delivery method. MDOT has selected a contractor with nationwide bascule bridge construction experience. This type of contract will also give designers more certainty in determining which construction methods will be most advantageous, balancing economy, with schedule concerns. Additionally, there is opportunity to develop a shared-risk approach for work items that carry the most uncertainty. The total investment on this project is estimated to be \$65 million.

Shared-Use Pathway Safety Project - I-496, Waverly Road, Lansing Road, Ingham County

The construction of a 10-foot-wide shared-use pathway along Waverly Road is an excellent example of a complex interagency safety project that addresses safety challenges for several different user groups, including pedestrians, bicyclists and motor vehicle drivers. The unique location of this project requires coordination between Lansing Township, Delta Township, Ingham County Road Department, Eaton County Road Commission, and MDOT.

The shared-use path is being developed in coordination with the resurfacing of Waverly Road, a local road, in conjunction with larger safety improvements being made by MDOT to the Waverly Road/I-496 interchange, and the Waverly Road/Lansing Road intersection. Funding for the pathway includes a Highway Safety Improvement Program (HSIP) grant, a Transportation Alternatives Program (TAP) grant, and an Ingham County Trails and Parks





Millage grant, while the Waverly Road/I-496 interchange and Lansing Road intersection improvements are funded through MDOT.

Once complete, the new shared-use path will not only address several challenging intersections but it will also fill gaps in the network that serves people who travel through the corridor on foot or by bicycle. The Waverly Road/I-496 project includes bridge repairs, interchange ramp reconfiguration, and a traffic signal to alleviate turning movement difficulties experienced by traffic exiting I-496. Utilizing the region's existing and planned sidewalks, bicycle lanes and shared-use pathways, this overall network provides access to several commercial areas, residential neighborhoods and employment centers.

US-31 Improvements in Berrien County

The US-31 freeway project in Berrien County has been in development for more than 40 years. The construction of the freeway as approved in a 1981 Final Environmental Statement has been ongoing and was completed to Napier Avenue in 2003. The freeway extends from the

Indiana Toll Road and terminates at Napier Avenue, a local road. The connection of the freeway to I-94 was re-evaluated in 2004 with a Final Supplemental Environmental Impact Statement to avoid the Blue Creek Fen, which provides habitat to many unique species, including the Mitchell's Satyr butterfly.

In December 2018, the United States Department of Transportation (USDOT) granted MDOT \$20 million through the Better Utilizing Investments to Leverage Development (BUILD) program to complete this connection.

Starting in 2020, MDOT will invest an estimated \$115 million by making the following improvements:

- Reconstructing 3 miles of I-94 between Britain Avenue and the I-196 interchange by enclosing median with concrete barrier.
- Providing an auxiliary lane on I-94 between new US-31 and I-196 interchanges.
- Construction on 2 miles of US-31.
- Reconstruction and realignment of 1 mile of I-94 Business Loop (BL).
- Removal of Highland Avenue and I-94 BL bridges over I-94.
- Removal of the Euclid Avenue bridge over I-94 BL.
- New bridges that carry US-31/I-94 BL over I-94.
- Reconstruction of the Territorial Road bridge over I-94.
- Rehabilitation of the Benton Center Road bridge over I-94.
- Three new bridges over new lanes of US-31.
- A new I-94/I-94 BL/US-31 interchange.

These projects have been programmed and an environmental clearance re-evaluation is underway. The interchange will be built to accommodate the future capacity and operational needs for I-94, I-94 BL and US-31.

I-94 Jackson Area

The I-94 Freeway Modernization Study was completed in 2007 and included recommendations to modernize and upgrade a 9-mile section of I-94 from M-60 to Sargent Road in Jackson County.

The recommendations include:

- Constructing an additional travel lane in each direction.
- Replacing bridges to meet current design standards, including underclearance requirements.
- Redesigning seven interchanges.
- Improving operations and safety.

As part of the Final Environmental Impact Statement (FEIS), MDOT developed a phasing strategy for the entire I-94 Freeway Modernization Study. The phasing strategy documented projects that could be completed within five years (Phase 1), 25 years (Phase 2) and 40 years (Phase 3). MDOT completed Phase 1 with the reconstruction of the Hawkins and Dettman Road bridges over I-94 in 2007 and 2008, and the reconstruction of the Sargent Road interchange and removal of the I-94 Business Loop bridge in 2012.

In 2018 and as part of Phase 2, MDOT began making improvements to I-94 in Jackson County, including:

- Reconstructing 1.4 miles of freeway between Lansing Avenue and Elm Road.
- Resurfacing 3.5 miles between Lansing Road and M-60 and resurfacing 4 miles between Elm Road and Sargent Road.
- Rebuilding and redesigning the I-94/Cooper Street interchange, including the addition of new roundabouts on each side of the new bridge and reconstructing each of the ramps.
- Replacing and widening the bridge over the Grand River.
- Providing a merge/weave lane between the Cooper Street and Elm Road interchanges.

As part of the 2018 project, I-94 was shifted approximately 60 feet south of its previous location. The widening of the Cooper Street bridge and the bridge reconstruction over the Grand River required right-of-way acquisition primarily on the south side of I-94. The bridge over the Grand River and the Cooper Street bridge will be built wide enough and long enough to accommodate the future traffic needs for this corridor. This project is expected to be substantially complete in 2020.

In 2020, the M-60 bridge over I-94 will be replaced and reconstructed with a much wider footprint for additional lanes on I-94 in the future.

Beginning in 2021, the Lansing Avenue bridge over I-94 and the Elm Road interchange will be reconstructed. These projects have been programmed, and an environmental clearance re-evaluation is underway. Both locations will be built to accommodate the future capacity and operational needs for I-94.

I-196 and I-96 Freeway Corridor Improvements in Ionia, Kent and Ottawa Counties

Beginning in 2019 and continuing for three years, freeway reconstruction at the I-96/I-196 interchange in Grand Rapids will include:

- Replacing the bridge carrying westbound I-196 over eastbound I-96.
- Reconstructing I-96 from Leonard Street to M-44/M-37 (East Beltline Avenue).
- Reconstructing the I-196 freeway between Fuller Avenue and I-96.

While working through the constructability, mobility/traffic control, and structure study for both projects, MDOT staff identified significant challenges with the proposed replacement of the westbound I-196 bridge over eastbound I-96. Therefore, MDOT considered changing the bridge to carry eastbound I-96 over westbound I-196, essentially flipping the overpass, to attain a much simpler bridge to both construct and maintain. This concept was determined to be superior to

other alignment options while incorporating the original objectives and operational benefits in the approved Environmental Assessment (EA).

By flipping this bridge, MDOT can take full advantage of reduced impacts on the motoring public while constructing significant improvements and congestion relief to both freeways in 2019 through 2021. This concept also allows for the separation of both the eastbound I-196 and eastbound I-96 ramp movements to M-37/M-44 (East Beltline Avenue) in 2019/2020. Then, in 2021, eastbound and westbound I-196 will be reconstructed from Fuller Avenue to I-96 with an additional through-lane to improve traffic operations and tie into the 2019 project. Overall, this concept is making significant operational enhancements possible with less mobility impacts, especially after 2019. It should be noted that this concept will not require additional right of way and falls within the original footprint of construction proposed and cleared in the EA.

The 2019 work expected to continue into 2020 includes the following:

- Reconstructing eastbound I-196 from the Maryland Avenue bridge to eastbound I-96; two lanes will be carried past the new eastbound East Beltline Avenue ramp, then transition to one lane prior to merging with eastbound I-96.
- Constructing a new eastbound I-96 ramp to East Beltline Avenue, including the construction of a new bridge over eastbound and westbound I-196, to separate local merging and through-traffic.
- Connecting a new eastbound I-196 ramp from the Maryland Avenue bridge to the new eastbound I-96/East Beltline Avenue ramp.

The 2021 improvements include:

- Reconstructing I-196 from Fuller Avenue east to the Maryland Avenue bridge.
- Reconstructing and widening the eastbound and westbound I-196 roadway for three lanes of traffic from Fuller Avenue east to the Maryland Avenue bridge;



this work will begin at the terminus of the 2010 “Fix on I-196” project.

- Reconstructing and widening the I-196 bridges over Plymouth Avenue to accommodate three lanes in each direction and sidewalks on Plymouth Avenue.
- Reconstructing and extending the Fuller Avenue entrance ramp to EB I-196.
- Replacing the eastbound I-196 bridge deck over the Grand River in downtown Grand Rapids.

Additional 2020-2024 projects on the I-196 and I-96 freeways include:

- 2020: Reconstructing eastbound I-196, from 32nd Avenue to Kenowa Avenue, including an eastbound weave/merge lane between 32nd Avenue and M-6, and in coordination with Hudsonville local roadway and pedestrian improvements on 32nd Avenue in Ottawa County.
- 2020: I-196 concrete joint repairs and surface treatment from Market Avenue to Lane Avenue in Grand Rapids.
- 2020/2021: I-96/M-21 (E. Fulton Street) interchange improvements in Grand Rapids Township.
- 2021: Reconstructing I-96 from Thornapple River Drive to Whitneyville Avenue in Kent County.
- 2021: Reconstructing westbound I-196 from Saugatuck/ Douglas to US-31 in Allegan County near Holland.



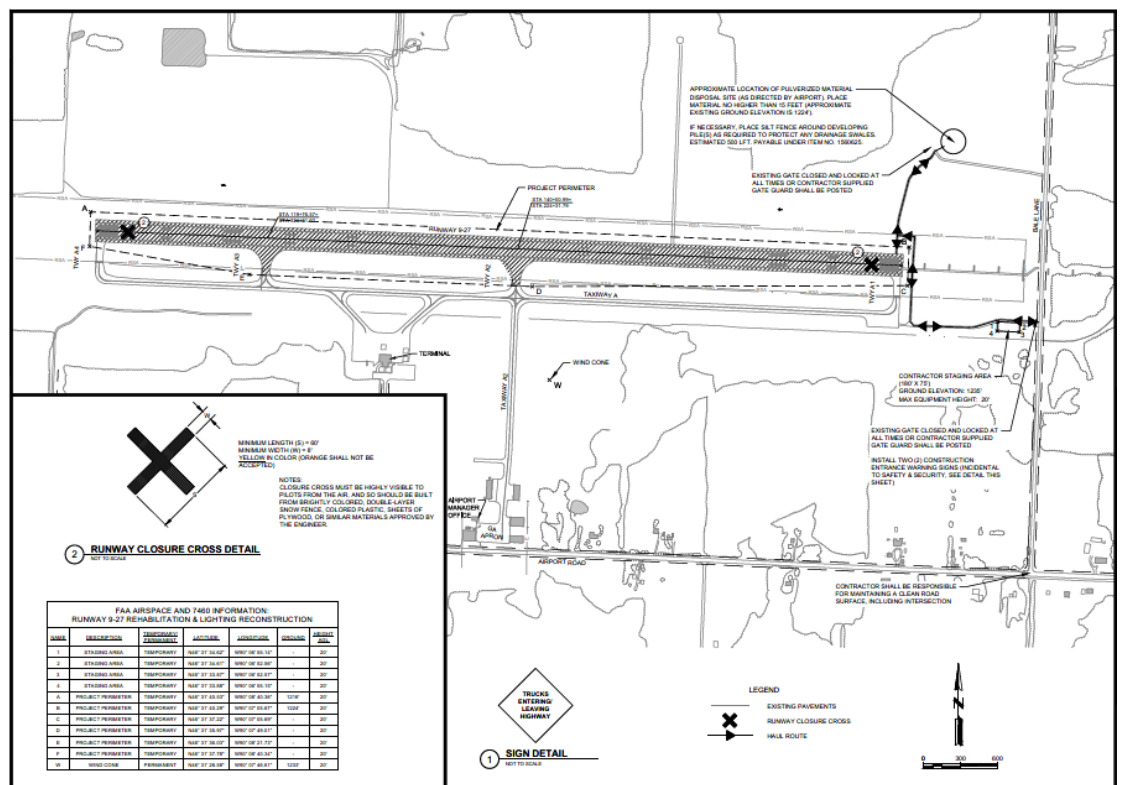
building will replace a 6,000-square-foot 1950s era building. The new terminal will vastly enhance passenger convenience not only because of improved traffic flow and efficiency but will also include a passenger boarding bridge (currently passengers must walk onto the ramp to board or disembark the airliner) and a baggage claim carousel.

- 2021: Resurfacing westbound I-196 from US-31 to M-40/ CSX Railroad near Holland.
- 2022: Reconstructing westbound I-96 from Bliss Road to Sunfield Highway in Ionia County.
- 2023: Resurfacing I-96 from Cascade Road to M-11 (28th Street) in Kent County.
- 2023: Reconstructing I-196 from I-196 BL (Byron Road) to 32nd Avenue in Ottawa County.
- 2024: Reconstructing eastbound I-96 from Bliss Road to Sunfield Highway in Ionia County.

In addition to the new terminal building, the parking lots will be improved with additional parking added. The north aircraft parking ramp will also be expanded with repairs made to the remaining area in addition to a new drainage project. This project cost is \$12.8 million and includes federal, state, and local funding.

Airport Enhancements in Alpena and Gogebic Counties

Alpena County Regional Airport (APN) is a commercial air carrier airport owned and operated by the County of Alpena. In November 2018, construction began on a new passenger terminal. The new 13,000-square-foot



Gogebic Iron County Airport (IWD) is a county-owned public use airport located northeast of the central business district of Ironwood in Gogebic County. The rehabilitation of runway 9/27 is under design and is scheduled to begin construction in 2020. Included with the rehabilitation are paved shoulders, lighting, wind cone, and guidance signing. This project will bring the runway up to current standards and significantly improve the runway's surface. The last major rehabilitation was done in 1993. This construction cost is \$5 million of federal, state, and local funding.

Regional Transit Projects Throughout Michigan

MDOT encourages regional transit initiatives that improve access to services for Michigan citizens. Technical and financial support is provided by MDOT to local agencies who endeavor to improve regional mobility.

Regional transit planning is an essential element in the effort to fill service gaps and improve the transit options available. In southeast Michigan, Regional Transportation Authority (RTA) of Southeast Michigan continues its planning process for the expansion of regional transit services in Wayne, Oakland, Macomb, and Washtenaw counties. The master plan for the region and a ballot measure are needed for the funding of regional transit services.

The Flint-area transit agency, the Mass Transportation Authority, continues to work with the Suburban Mobility Authority for Regional Services (SMART) to coordinate services to meet transit needs that have been identified in the study that was

done on the I-75 corridor between Bay City and Detroit, including the I-69 corridor from Port Huron to Lansing.

Two demonstration intercity bus routes to improve access to the national network are currently being considered. Both routes would run east-west with one providing service from Traverse City to Gaylord and then on to Alpena. The second route being evaluated would provide service from either Bay City or Saginaw to Mt. Pleasant and on to Big Rapids. The best connectivity to other routes and ridership numbers are factors being considered before the routes are finalized and bids for service are solicited.



Mobility

Active Transportation

MDOT has a long, rich history supporting the movement of people and goods in ways other than by car or truck. In the early 1900s, Horatio S. "Good Roads" Earle, Michigan's first transportation commissioner, championed the need to improve our roads routinely damaged by horse and buggy. Mr. Earle's motivation was to improve roads for bicycling, a common form of transportation in the 1900s. Today, MDOT continues to support active transportation modes and works with community partners in many ways to develop and expand facilities for pedestrians and bicyclists.

MDOT support for active transportation modes ranges from policy, design and funding to education and training. Road projects led by MDOT have impacts on a local community depending on the nature of the work. When projects originate from MDOT, the Context Sensitive Solutions (CSS) approach is incorporated into the design process. This approach ensures that MDOT engages community leaders, residents, business owners, and users of the transportation asset in discussions regarding the desires of the community.

When designing projects, MDOT relies on the latest innovations and designs that promote both safety and mobility of all road users, including pedestrians and bicyclists. MDOT routinely reviews and updates internal design guidance and utilizes nationally recognized guidance documents, including those produced by the National Association of City Transportation Officials (NACTO), when appropriate.

Communities across the state are including more innovative designs supporting bicyclists and pedestrians in road and bridge projects, including buffered and separated bike lanes, refuge islands, and hybrid activated crosswalk beacons (HAWKS). These designs have become more commonplace on both trunkline and local roads over the last several years.

When project elements supporting pedestrians and bicyclists are incorporated early into the planning

and design process, it may be possible for MDOT to integrate some of the new elements into the overall budget, but that is not always the case. When the desires of the community go beyond what MDOT can provide, community leaders are encouraged to contact the department for eligibility information on the Transportation Alternatives Program (TAP) and the Safe Routes to School (SRTS) program to see if these programs might be a good fit for the project. These competitive grant programs can be sought after by local units of government to help finance project elements that go beyond MDOT's ability to participate financially.

In addition to the administration of the grant programs and the implementation of the CSS engagement process, state statute enables MDOT to provide education and training both internally to staff as well as to the public. MDOT provides informational brochures, resource summaries and research reports, as well as day-long trainings. These resources are made available on the MDOT website.

With more than 120,000 miles of roads in Michigan and more than 600 different agencies with responsibility over these roads, creating a safe and comfortable network for pedestrians and bicyclists can be challenging. Creating an interconnected network for people walking or bicycling takes coordination, cooperation and careful planning. MDOT strives to provide support to the residents of Michigan and communities across the state to create healthy, vibrant, economically diverse and safe transportation options for everyone regardless of their preferred mode of travel.

The New Mobility

"New Mobility" is a term that is sweeping the globe and a concept that is revolutionizing how people get from point A to point B and everywhere in between. It is the convergence of mobility on demand (MOD), mobility as a service (MaaS), and transportation demand management (TDM), and means substantial changes for governments, transit agencies, car companies, and consumers alike.

The once stable public transit industry is now a dynamic, fast paced, ever-changing anomaly. MDOT's Office of Passenger Transportation (OPT) has had a clear role within the public transit industry for the past 35 years to provide subsidies for operating and capital, guidance regarding equitable provision of service, and technical assistance to help the transit agencies comply with state and federal regulations. The public transit agencies then designed and implemented their service plans and the roles were clear and distinct. Recently, the flood gates of innovation and technology opened on this once stable ecosystem, and there are feelings of being overwhelmed and confused because of the extent of the new opportunities. There are new players popping up every day - new applications, service models, and equipment - and as a result there are higher expectations from the public regarding mobility options. Local transit agencies do not have the resources to research what might work for them or the discretionary funds to risk implementing a new technology or service model that might fail. At the same time, many private tech firms and mobility startups are struggling to prove the effectiveness of their products.

Throughout this struggle, one thing has remained constant: large mobility gaps prevent people from receiving the goods and services and enjoying the independence they desire and deserve. MDOT is taking an active role in the New Mobility to ensure that the state's transportation network can embrace innovation while providing the most efficient, safe, and responsive services that will allow Michigan citizens to lead healthy, productive, and independent lives.

Innovation

Connected and Automated Vehicles

PlanetM is a mobility program created to support research and development of connected and automated vehicles (CAV) and infrastructure in Michigan. CAV has the potential to impart dramatic safety benefits through the application of this advanced technology on Michigan roadways. In addition, the continued development of this

technology in Michigan is critical to the auto industry and the state's economy. The program involves collaboration among the automobile industry, universities, and all levels of government. The following paragraphs discuss efforts that are underway to ensure that the state of Michigan continues to be a leader in CAV technology. Many newer vehicles already have systems that warn the driver to stay in their lane, or even stop the vehicle, if the driver is distracted before an incident occurs. These systems exemplify the early stages of CAV technology. Whether mandated by the government or demanded by consumers, MDOT must be ready for the changes these technologies will bring to the use and maintenance of the road network.



What's the difference between connected and automated vehicles?

Connected vehicles (CV) and automated vehicles (AV) are two different technologies that are both developing and will have fundamental impacts on transportation. A CV is a car or truck that is equipped with dedicated short-range communication devices, primarily two-way radio frequencies reserved by the federal government for transportation safety purposes. This allows the car to either communicate with other vehicles on the roadway or with roadway infrastructure, such as traffic lights. This communication is often referred to as vehicle-to-vehicle (V2V) or vehicle-to-infrastructure (V2I) and is already being incorporated into new vehicles and roadway infrastructure. MDOT is focused primarily on V2I testing and implementation, as this technology is dependent on infrastructure outfitted with sensors and communication devices.



Examples of MDOT efforts in this field, which involve infrastructure communicating with the vehicle or operator, include:

- By 2020, 500-plus miles of major arterials in Michigan will be equipped with V2I technology, allowing equipped vehicles to communicate with infrastructure such as signalized intersections and other roadway elements.
- Standard signalized policy has identified that all new or upgraded traffic signals on the MDOT system will be CV-enabled; this will mold the direction of both Intelligent Transportation Systems (ITS) and signals programs moving forward. Changes anticipated include but are not limited to an update to the traffic signal controller specification standards to incorporate necessary CV capabilities, developing a process to configure and test roadside units (RSUs) at the signals shop, etc.
- Transit signal priority and preemption maximizes the connectivity of a signalized corridor, focusing on the utilization of signal phase and timing (SPaT) information to reduce the dwell time for select vehicles to maximize the throughput of the corridor.

AVs are cars or trucks that sense their surroundings with such techniques as radar, light detection and ranging technology, global positioning systems (GPS), and computer vision. The vehicle uses these technologies to identify its location in the environment, thereby determining an appropriate navigation path and keeping itself on the road while avoiding obstacles. This potentially can allow the passenger in the car to be just that: a passenger and not an operator, although this technology is still in its very beginning phases.

American Center for Mobility

The American Center for Mobility (ACM) is a testing and product development facility for CAV technology at the 335-acre historic Willow Run in Ypsilanti Township. The ACM allows automotive industry and government agencies to test vehicles, roads, and infrastructure and communication systems in a variety of physical and weather environments.

The facility offers unique real-world features, including but not limited to:

- 2.5-mile highway loop
- 700-foot curved tunnel (Willow Run bypass tunnel)
- 1.5-mile urban arterial road
- Six-lane PlanetM boulevard
- Six-by-six-lane reconfigurable intersection
- User-defined area, 8+ acres
- Urban canyon
- Parking environment
- Two-lane roundabout
- Bicycle lane and pedestrian corridor
- Dedicated short-range communications (DSRC)
- 4G long-term evolution (LTE) (private)
- Cloud (data management and analytics platform)
- Garages, short and long-term
- 41 intersection points

These elements help to create the perfect environment for testing and setting national standards for mobility technologies before vehicles and other products are deployed. The ACM also serves as a development facility allowing companies to lease space for office and research use through both long-term and short-term garages and other amenities.

This nonprofit facility is a collaborative effort with MDOT, the MEDC, the University of Michigan, Business Leaders

for Michigan, and Ann Arbor SPARK. The ACM helps support the PlanetM initiative for Michigan to be a leader in transportation and automotive innovation. The ACM also offers an opportunity for larger-scale research, development, and testing due to both the size of the facility and more diverse infrastructure. This facility has the potential to be the last stop of testing before vehicles are on the road, as well as the potential to be a place where vehicle certification could happen in the future.

Michigan enacted several pieces of legislation in late 2016 intended to keep Michigan at the forefront of AV testing, research, and deployment. Among other features, this legislation enables on-road testing of technology, commercial vehicle platooning, and establishes the ACM.

Mobility Initiatives

\$8 Million Mobility Challenge

The \$8 Million Michigan Mobility Challenge was a collaborative effort that included MDOT, MEDC/PlanetM, the Michigan Department of Health and Human Services, the Michigan Veterans Affairs Agency, The Bureau of Services for Blind Persons, and the Michigan Department of Civil Rights – Division on Deaf, Deafblind, and Hard of Hearing. MDOT issued a call for projects to distribute \$8 million to fund multiple innovative pilot transportation projects of varying sizes to solve mobility gaps for seniors, persons with disabilities and veterans in urban, rural and suburban communities throughout the state of Michigan.

Thirteen demonstration projects were selected from 40 proposals received. Some of the funded projects demonstrate variations of mobile apps that allow regional coordination, community building, mobility on demand, mobile booking, payment and trip reminders. These will provide insight into the elements that are most appropriate for various settings. There are also multiple projects that address the special needs of persons with visual impairments when attempting to navigate to transit pick-up locations, the correct bus and the final few feet of the journey to their exact destination. Other projects include an accessible autonomous vehicle shuttle, an

autonomous wheelchair securement system, and a robot used for goods delivery to homebound individuals.

Each project will be monitored and evaluated so that best practices and lessons-learned will be fully documented and made available to inform future use of the technology or innovation. The projects are in varying stages of deployment and their progress can be tracked on the \$8 Million Michigan Mobility website at www.michigan.gov/mobilitychallenge.

NAIAS 2020 Michigan Mobility Challenge

The Michigan governor's office, MDOT, and MEDC's PlanetM program has issued a request for proposals to demonstrate the potential of connected and automated vehicles to transform how visitors and residents will move during the North American International Auto Show (NAIAS) in June 2020. In concert with the 2020 NAIAS activities, this challenge will spotlight what Michigan offers for the future of automotive technology and reiterate NAIAS's role as a global platform for new transportation reveals.

The NAIAS 2020 Michigan Mobility Challenge will call upon industry innovators to propose new and dynamic technology deployments that embody how automated and connected vehicle technology can transform how we live, work and play. The demonstration will provide automated transportation for NAIAS attendees to and from DTW and places of interest in downtown Detroit all brought together through a seamless user-experience app.

Automated Bus Consortium

MDOT partnered with MEDC/PlanetM to join 10 other transit and transportation agencies from around the country to form the Automated Bus Consortium, a collaboration lead by AECOM, which is designed to investigate the feasibility of implementing pilot automated bus projects across the United States. The consortium is a first-of-its-kind approach to accelerate the deployment of automated transit technologies and will combine the purchasing power and collaborative decision-making of these founding transit agencies

nationwide. The pilot projects will use full-sized, full-speed buses and enable consortium members to collectively demonstrate and deploy automated technologies in live-service environments. By joining the consortium, the cost of conducting local automated bus projects will be reduced for each agency. Lessons learned and best practices from each pilot project will be shared among member agencies and with the Federal Transit Administration to promote better and faster learning and adoption of safety protocols and operational insights.



Intelligent Transportation System Implementation

TSMO and ITS Strategic Plans

MDOT's mission is to "Provide the highest quality integrated transportation services for economic benefit and improved quality of life." In alignment with this, the Transportation Systems Management and Operations (TSMO) business area has developed its strategic plan to outline its mission to operate and manage an optimized, integrated transportation network by delivering high-quality services and reliable mobility for all users.

In coordination with the development of this strategic plan, the Intelligent Transportation Systems (ITS) Program has developed its strategic plan with a mission to provide high-quality, adaptive, and integrated transportation technology solutions that improve safety and mobility for all users. This plan will act as a compass for the MDOT ITS Program in supporting decisions and setting priorities moving forward in the changing ITS landscape.

I-96 Flex Route Project

As the primary route to Lansing/Detroit, with an average annual daily traffic (AADT) of 163,300 vehicles per day, the

I-96 corridor experiences heavy congestion that results in a crash once a day, leading to large planning times to get through the corridor. With these operational concerns, the Metro Region office is planning to construct an active traffic management (ATM) system (known as Flex Route) on I-96 from Kensington Road to the I-275/I-696/M-5 interchange.

The I-96 Flex Route project follows the successful deployment of the US-23 Flex Route project north of Ann Arbor. Early results from the US-23 Flex Route project are showing improvements in travel time and reliability for both northbound and southbound traffic.

Southbound US-23 is showing the following improvements:

- Planning time improvement over 50 percent (from 22 minutes to 10 minutes).
- Average travel time savings of about five minutes (for 8.5 miles).
- Speed increases of 19 mph (from 43 mph to 62 mph).

Northbound US-23 is showing the following improvements:

- Planning time improvement over 27 percent (from 21 minutes to 15 minutes).
- Average travel time savings of about 1.4 minutes (for 8.5 miles).
- Speed increases of 6 mph (from 48 mph to 54 mph).

The safety improvements from the system are currently under analysis to determine the reduction in number of crashes after system implementation.

The construction of the I-96 ATM system is intended to reduce congestion and increase safety by providing improved travel time reliability, reduced planning time and better speed harmonization. The project will provide a limited-use lane to be used during peak congestion hours and for incident management needs and special events. The project corridor will have lane control signs with dynamic message signs (DMS), vehicle detection and ramp meters at select on ramps.



an investment to overhaul the aging signal system and prepare for the future of traffic signal management. The ability to remotely manage and control traffic signals is the nucleus to providing enhanced capabilities to optimize traffic signal operations, improve safety, provide quick and effective responses to disruptive incidents, reduce system maintenance costs, and prepare for

future traffic management (i.e., performance metrics, CVs, and adaptive traffic signal timings).

I-94 Variable Advisory Speed Limits

According to the Road Safety Audit of I-94, various locations have been identified and had suggestive actions compiled by MDOT and Michigan State Police (MSP). Variable speed limits were one of the suggestive actions for I-94 in Van Buren County, an area that historically receives the highest snowfall totals and has the highest percentage of commercial vehicles within the Southwest Region. This segment of I-94, in winter weather, has a crash rate 24 percent higher than other 70 mph routes. In addition to this, crashes along this corridor have shown to have speed differentials ranging from 20-45 mph before impact.

This project involves installing a variable speed limit advisory system along I-94 in Van Buren County. During adverse weather conditions and traffic incidents, motorists need to be advised of safe travel speeds due to changing weather and road conditions along this corridor. The variable speed advisories will be integrated into the ATM, allowing the automation of changing advisory speeds based on data received from nearby environmental sensing stations, vehicle detectors and incident notifications. This will allow for direct communication to motorists of the real-time conditions with an advisory speed, which will change driver behavior, resulting in a more uniform speed. This, in turn, will help mitigate the 65 percent of crashes that occur when driving too fast for road conditions.

Central Signals Control Software

As roadway technology continues to advance at an unprecedented pace, MDOT's traffic signal system requires

Based on recent industry outreach, the overwhelming response was clear that most DOTs and transportation agencies are gaining operational efficiencies through actively managing their traffic signals through a central platform. The system provides efficiencies to DOT staff daily responsibilities (signal maintenance, signal optimization, and troubleshooting) and arterial performance (early identification of failed equipment, corridors in need of retiming, and ability to respond in real time to incidents, special events, and other influxes in traffic). Traffic signals are one of the most critical assets to providing safe and efficient travel for Michigan motorists. In 2019, MDOT procured and deployed a central software to be operated from MDOT's existing Transportation Operation Centers (TOCs).



Public Comments

Public Comments

Revenue Assumptions and Investment Strategies

MDOT is responsible for all roads and bridges on the state highway system, known as the state trunkline system, that start with M, I, or US (and some unsigned or old routes), such as M-43, M-59, I-94, I-96, US-131, etc. MDOT jurisdiction includes approximately 9,700 route miles of state trunkline highways and 4,413 bridges.

The entire state transportation system, including roads, bus, rail, nonmotorized facilities, aviation, marine, and inter-modal facilities, plays an integral role in supporting the state and region's economy and quality of life for residents. The 5YTP presents MDOT's planned investments in this system, which are selected to provide direct benefit to Michigan citizens by preserving and improving infrastructure condition while also enhancing safety and offering expanded options, mobility, and access.

This 5YTP represents a state investment, across all modes, of about \$12.3 billion. This includes highway, aviation, bus, rail and marine programs. A total of \$9.4 billion (including routine maintenance) will be invested in the 2020-2024 Highway Program. Over these five years, an estimated \$700 million will be invested in the Aviation Program and \$2.3 billion will be invested in the Public Transportation Program, which includes bus, rail, marine, and port programs. The Highway Program focuses on system preservation through the repair, operation and maintenance of Michigan's roads and bridges. The majority of the Multi-Modal Program concentrates on system preservation as well.

Highway Program

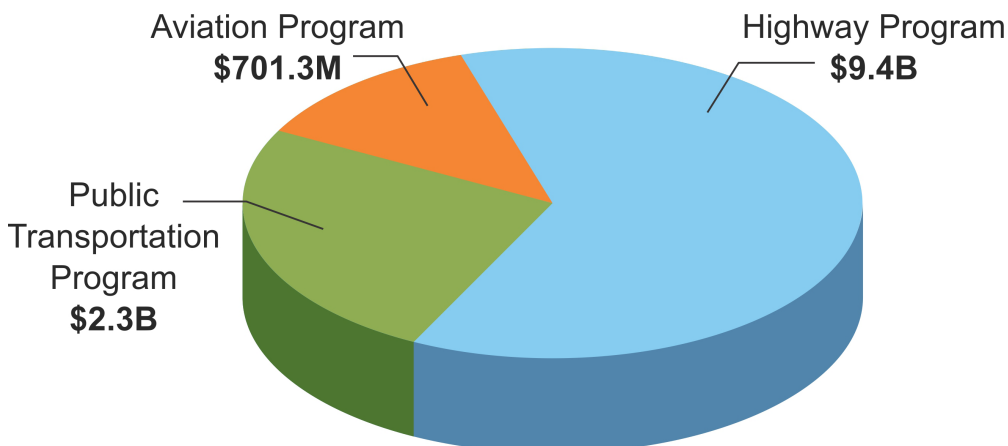
Federal Funding

FY 2020 will mark the fifth year of the five-year surface transportation bill known as the FAST Act. The legislation was signed into law in December 2015 and authorized federal transportation programs and funding for the period covering the 2016-2020 fiscal years. The FAST Act authorized the investment of \$305 billion in federal funding in the nation's surface transportation system over its duration.

The FAST Act provided a modest increase in overall funding for the federal highway program. The legislation created two freight programs to better target investments to projects that promote efficient movement of freight. Funding for these two programs accounted for most of the increased funding provided by the FAST Act. Beyond the new freight programs, funding for the remaining federal highway programs grew by roughly the expected rate of inflation.

MDOT Five-Year Transportation Program FY 2020-2024

Five-Year Total Investment = \$12.3 Billion



The freight programs in the FAST Act build on the reforms included in the previous surface transportation authorization bill, the Moving Ahead for Progress in the 21st Century Act, or MAP-21. MAP-21 also transformed federal highway and transit programs through the establishment of a performance-based approach to decision-making. The FAST Act supports this initiative by funding efforts to collect and manage data for performance analysis, and to improve capacity of transportation agencies to better link investments with outcomes.

Reliance on non-transportation revenue to support investments in surface transportation is continued in the FAST Act. It transferred \$70 billion from the federal General Fund into the federal Highway Trust Fund (HTF) to ensure that all the investments in highways and transit during the FAST Act time frame were fully funded. This brings the total amount of non-transportation revenue that has supported investments from the HTF during the past seven years to nearly \$145 billion.

The FY 2020-2024 federal-aid revenue estimate is based on FAST Act estimates of federal funding available for Michigan, which is assumed to grow about 2 percent per year for the entire 5YTP time period.

It is projected that nearly \$4.4 billion in federal funding will be made available to the Highway Program for this 5YTP.

State Funding

The state has experienced challenges in providing adequate transportation funding. For many years, Michigan had difficulty finding state and local funds to match federal aid. State General Fund dollars were used in 2014-2016 to assure that MDOT did not lose available federal aid.

In 2015, a funding package that provides more state transportation revenue was signed into law. The nine-bill package included registration fee increases, motor fuel tax increases, and appropriations from the income tax revenue. The 2015 funding package generates new revenue incrementally beginning in FY 2017 through FY 2021.

On January 1, 2017, the gasoline tax increased from 19 to 26.3 cents per gallon, and the diesel fuel tax increased from 15 to 26.3 cents per gallon. The motor fuel tax was applied to compressed natural gas (CNG) as well. Beginning in 2022, fuel tax rates will be tied to inflation to help remedy the decline in purchasing power of the fuel tax.

Also, on January 1, 2017, registration fees for most cars and trucks increased 20 percent. New electric car fees of \$100 per year, and \$30 per year for plug-in hybrid cars, equalize road-user fees for vehicles that use little or no taxed fuel.

Starting in FY 2019, \$59 million in income tax revenue was appropriated to the State Trunkline Fund (STF). Income tax revenue redirection will increase to \$127 million in FY 2020, and then \$235 million in FY 2021. Each year thereafter, income tax revenue redirection will continue at \$235 million, annually.

Current long-range revenue projections estimate that nearly \$4.5 billion in state revenue will be available for MDOT's Highway Program over the five-year period that this document covers.

Funding Distribution

Public Act 51 of 1951 (Act 51) mandates how transportation funds are distributed and spent between MDOT and local entities. The intent of Act 51 in regard to federal highway aid is to distribute approximately 25 percent of federal aid to local jurisdictions for use on federal-aid eligible roads. Although federal funds are to be distributed to local agencies, MDOT remains responsible for ensuring federal regulations are followed and funds are managed appropriately. MDOT complies with this provision in an oversight role at various points throughout a project, while local agencies maintain responsibility for planning and scoping projects, providing a complete design, and for providing testing and construction engineering services. Local agencies ultimately deliver more than 500 federal-aid projects annually with an average project cost of approximately \$500,000.

The state funds collected from fuel tax and vehicle registration revenues are deposited into the Michigan

Transportation Fund (MTF), the distribution fund for transportation revenues. After statutory off-the-top deductions, MDOT receives approximately 39 percent of this fund through the STF. County road commissions receive 39 percent of the MTF and cities receive about 22 percent.

Highway Program Investment Strategy

The STC is the policy-making body for all state transportation programs that provide the basis for highway funding allocation decisions. MDOT developed an investment strategy process to accomplish the effective use of financial resources on the state trunkline Highway Program. The process allocates an investment amount to various program categories (bridge, road, safety, etc.) annually, based on program improvement strategy, goals, and statewide priorities. It sets the level of funding to achieve highway improvement priorities and provides a tool to constrain the overall statewide program against available revenues.

MDOT has a pavement preservation formula that allocates funding to its seven regions. The formula weighs four overall factors: pavement condition, eligible lane miles for pavement reconstruction and repair work, usage (average daily traffic volumes), and regional cost. These factors form the basis for how pavement preservation funds are distributed to each region. The formula is updated annually with current pavement condition, traffic, cost and eligible lane miles.

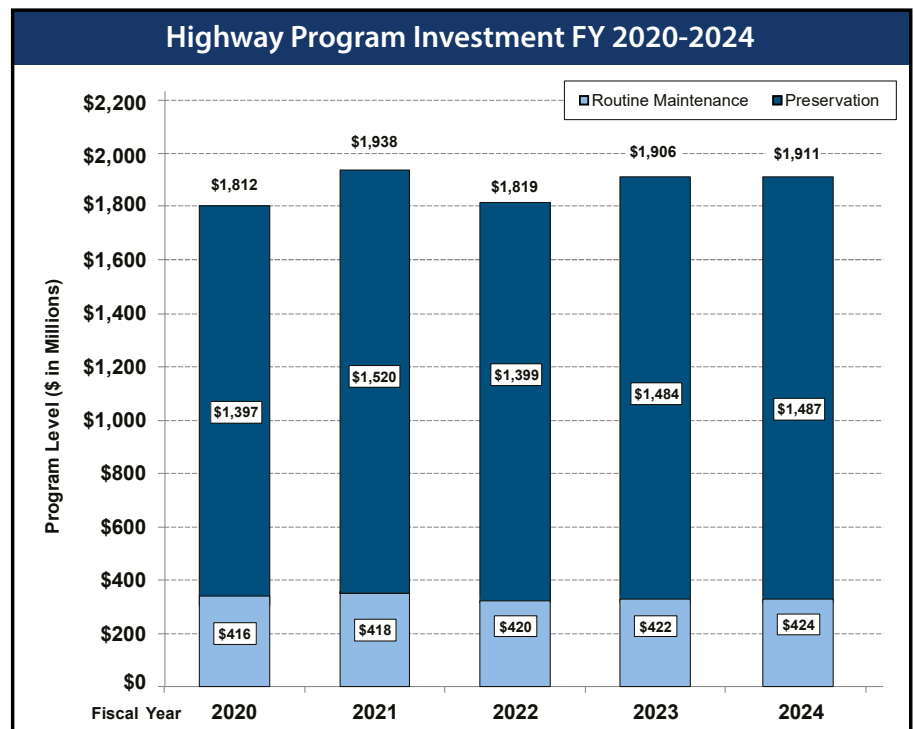
Bridge funding is distributed to MDOT regions using the bridge preservation allocation formula. It uses the deck area of bridges in each National Bridge Inventory (NBI) condition to allocate funds to each MDOT region. Funding is split into investment targets for replacement, repair, and preventive maintenance work.

The table on the following page provides the Highway Program investments strategy for FY 2020-2024.

The FY 2020-2024 5YTP estimates that investments for the Highway Program total approximately \$9.4 billion. This total reflects investments for pre-construction (scoping, design, environmental clearance, and right-of-way acquisition) and construction activities. This Highway Program investment will provide Michigan travelers with approximately 530 miles of improved roads per year over the next five years, and repairs to 133 bridges per year. MDOT also will manage its road system by extending the life of approximately 1,090 miles of pavement each year through the capital preventive maintenance (CPM) program and 400 miles of non-freeway resurfacing.

Highway projects can be viewed on a statewide interactive map online.

The following chart illustrates the annual Highway Program investments over the five-year time frame.



Highway Program Investment FY 2020-2024

	FY 2020-2024 Annual Average (millions)	Five-Year Total (millions)
REPAIR AND REBUILD ROADS AND BRIDGES		
REPAIR AND REBUILD ROADS		
Rehabilitation and Reconstruction	\$611	\$3,056
Capital Preventive Maintenance	\$106	\$528
Freeway Lighting	\$0.36	\$1.8
Freeway Resurfacing Program	\$20	\$100
Non-Freeway Resurfacing Program	\$47	\$235
Trunkline Modernization	\$203	\$1,015*
TOTAL - Repair and Rebuild Roads	\$987	\$4,936
REPAIR AND REBUILD BRIDGES		
Bridge Replacement	\$59	\$297
Bridge Preservation	\$79	\$395
Big Bridges	\$31	\$157
Special Needs	\$21	\$106
Culverts-Capital	\$2	\$10
Blue Water Bridge-Appropriated Capital Outlay Projects	\$3	\$15
TOTAL - Bridges	\$196	\$980
ROUTINE MAINTENANCE	\$420	\$2,099
TOTAL - REPAIR AND REBUILD ROADS AND BRIDGES	\$1,603	\$8,014
SAFETY AND SYSTEM OPERATIONS	\$191	\$953
OTHER		
Transportation Alternatives	\$7	\$35
Roadside Facilities	\$9.5	\$47
Workforce Development	\$9	\$45
Non-Federally Funded Programs	\$51	\$253
US-31 BUILD Grant	\$7.8	\$39
TOTAL - FIVE-YEAR TRUNKLINE PROGRAM	\$1,877	\$9,385*

*Includes \$566 million for FY 2020-2024 for I-75 Oakland County Segment 3 DBFM

Multi-Modal Program

MDOT's FY 2020-2024 Multi-Modal Program includes two main areas: public transportation and aviation. The Public Transportation Program is administered by two offices: the Office of Passenger Transportation (OPT) administers the bus and marine programs while the Office of Rail (OOR) administers the rail and port programs. The Office of Aeronautics administers the Aviation Program. These three offices provide capital and operating assistance, technical support, and safety oversight for the department's Multi-Modal Program.

The Multi-Modal Program is focused largely on continued safe and secure operation of the existing transportation system through routine maintenance, capital replacement and repair, and preservation of existing service levels. MDOT's approach to the Multi-Modal Program differs from the Highway Program as much of the infrastructure is owned, managed, and operated by entities other than MDOT, and the state and federal funding that MDOT is responsible for represents only a small portion of the overall investments in these modes.

Public Transportation Program

MDOT's Public Transportation Program includes local bus, intercity bus, marine passenger, vanpooling, port, freight rail, and passenger rail. The program provides for a combination of capital and operating assistance, technical support, safety oversight, and compliance monitoring for each of the modes.

The Public Transportation Program is primarily supported by annual appropriations. Comprehensive Transportation Fund (CTF) revenues are expected to grow slightly based on inflation, for a total five-year investment estimated at \$2.3 billion.

The investment of CTF revenues in the Public Transportation Program is determined by detailed requirements currently set forth in Act 51, as well as the annual appropriations process. Act 51 requires the majority of CTF revenues to be used for local transit and are focused heavily on the preservation of the existing public transportation system. Because the CTF is subject to an annual appropriations process, it is rare that MDOT makes a multi-year funding commitment from the

MDOT's Multi-Modal Investment Strategy

(Subject to appropriation of state, federal, local, and private funds.)

	FY 2020	Five-Year Total
AVIATION		
Airport Improvement Program (AIP)*, Air Service Program (ASP)	\$140.3 million	\$701.3 million
PUBLIC TRANSPORTATION PROGRAM		
Local Bus, Intercity Bus, Passenger Rail, Rail Freight, and Ports**	\$457.1 million	\$2.3 billion
TOTAL		\$3 billion

* Includes comprehensive program of needed investments for primary airports and general aviation airports, as identified in the MDOT AIP.

** Includes federal, local, private, and state expenditure authority, which is often overstated to account for potential revenue.



CTF, other than continuation of the annual programs mandated in Act 51. Therefore, what is presented in this document is MDOT's annual program for FY 2020, the estimated funding that may be available for the remaining years of the program (FY 2021-2024), and a description of the factors anticipated to influence both the funding availability and the annual decisions that will be made over the life of this program.

Local Bus Program

The Local Bus Program provides funding for operating and capital support, training, and special projects to local bus operators that service the public. Assistance is also provided to support transportation services focused on the needs of senior citizens and persons with disabilities, as well as the transportation-to-work needs of low-income individuals. A total of 119 providers (81 local agencies and 38 specialized services agencies) in all 83 Michigan counties are provided support under these programs.

State funds are combined with federal and local dollars, including farebox revenue and local millages, to support operation and maintenance of the local bus network. The budgeted funds for FY 2020 are anticipated to increase

the current funding levels in state Local Bus Operating (LBO) assistance. The CTF available to match federal aid will be sufficient to leverage all anticipated federal operating and capital formula allocations but may not be sufficient to match all competitive awards. A high level of success in receiving federal discretionary funds could put a strain on the CTF.

MDOT's local bus investments will focus on:

- Preservation of existing services in all 83 counties via operating assistance to local bus and public marine service providers.
- Preservation and maintenance of existing infrastructure (largely locally owned) via state investment and match for federal funds to support routine vehicle replacement.

- Support of local capital strategies established by individual agencies via matching federal capital grants for infrastructure replacement and repairs, and, in very limited situations, some minor capacity expansion.

The FAST Act continued all federal transit formula programs as outlined in MAP-21, with increases that are roughly inflationary. It maintains the same basic structure of these programs in terms of which programs and amounts apportioned to the state to deliver to sub-recipients, and funds that are apportioned directly to urbanized areas.

The FAST Act included the Bus and Bus Facilities competitive program that allows the Federal Transit Administration (FTA) to issue grants to states and transit agencies for capital projects. This program restored an important source of capital funding eliminated in MAP-21, which had resulted in a reduction of federal funding to agencies in Michigan and projected declines in the condition of the state's bus infrastructure. MDOT and urban agencies throughout the state are likely to compete for these funds in hopes of receiving grant awards to improve the condition of rural and specialized transit fleets.

It is important to note that more than 80 percent of FTA formula funds for local bus systems go directly to transit agencies and are not reflected in MDOT's 5YTP. Under Act 51, all federal funds are matched by MDOT using the CTF funding appropriated for that purpose. When CTF dollars are not sufficient to match federal funds, the impact is absorbed by the local transit infrastructure and reduces a transit agency's ability to access federal funds. Given the discretionary nature of some of these funds, it is not yet known if the CTF dollars available will be sufficient to match all available federal transit aid.

Vanpooling Program

The MichiVan Program will be maintained with state, federal, and local funds. MDOT contracts with private service providers to help organize and sustain the MichiVan vanpool program as a commuting alternative. Federal funds for MichiVan come from the Federal Highway Administration's (FHWA) Congestion Mitigation and Air Quality (CMAQ) program and are included in the Highway Program Investment Strategy. In addition, a small amount of CTF is used each year for the program.

Marine Passenger Program

While the FHWA Ferryboat Formula Program provides a guaranteed annual allotment to eligible ferry systems in Michigan, the annual funding level for each system

is inadequate for major capital improvements, such as replacing ferry vessels, expanding terminals or docks, or other upgrades. Each ferry system that receives a federal allocation through this program determines how best to use the funds. The funding level is estimated to increase 2.3 percent each year. The funds that will come to Michigan under this program are not shown in the bus and marine programs but are included in the Highway Program Investment Strategy.

The four state-subsidized marine passenger systems will continue to receive LBO called for in Act 51 to preserve the service provided. State marine capital funds available throughout this five-year period will be used for routine infrastructure maintenance and improvements to ensure the integrity of the system. However, due to the small amount of state and federal capital funding available for the Marine Passenger Program, deterioration of the locally owned infrastructure over the life of this program is likely.

Intercity Bus Program

The Intercity Bus Program provides both operating and capital assistance for the intercity network in the state, with the goal to allow residents access to the national transportation network. The program is supported with a combination of federal and state funds, with the exception of the Terminal Development Program, which pays for small projects using state funds only.



The Intercity Bus Program distributes CTF and federal Section 5311(f) program funds for the purchase of motor coaches and the support of select intercity bus routes within Michigan. In addition, the program is responsible for maintaining four transportation centers throughout the state. The Detroit intercity bus facility is nearing the end of its useful life, so more frequent and thorough inspections are planned to maintain the aging infrastructure until plans for a new facility can be finalized. Failure of any major mechanical or structural components could require allocating additional funds and speeding up the facility replacement schedule. The desire is to incorporate intercity bus services into a multi-modal service center.

MDOT will continue to use state and federal funds to contract with intercity bus carriers to provide route service that would not otherwise exist (i.e., service that would not be provided by the carrier absent a state subsidy) and that are essential to maintaining national connectivity. Every three years, MDOT bids out the five routes in northern Michigan that private carriers have previously abandoned due to lack of profitability. Vehicles used on these routes and routes in the southern portion of the state deemed essential to national connectivity also are funded with a combination of state and federal funds. Based on the FAST Act and anticipated CTF funding levels, the current level of service will be maintained from FY 2020 through FY 2024.

The federal In-Kind Match Program allows states to use the value of connecting unsubsidized intercity bus service as in-kind match for a route subsidized by the FTA 5311(f) program, allowing MDOT to stretch both state and federal funds without putting stress on state funding. MDOT will continue to utilize this program to support a route between Detroit and Port Huron that provides a meaningful connection for both bus and train passengers.

In addition to the Detroit-to-Port Huron route, MDOT has engaged in a partnership with the Wisconsin Department of Transportation (WisDOT) to co-fund two routes that benefit both states and provide meaningful connections to the national network. However, beginning in FY 2018, WisDOT began using the federal In-Kind Match Program to fully fund one of these routes using their federal 5311(f) funding and credits generated from a privately funded route in Wisconsin, freeing up Michigan CTF funds to be used for other in-state projects. The Wisconsin DOT (WisDOT) intends to fund the second route with in-kind match as well, but it may not be during this 5YTP time period.

MDOT is currently evaluating two east-west routes to provide more access to the national intercity network. The route areas under consideration are in the upper part of the Lower Peninsula, with a route connecting Traverse City to Gaylord and Alpena, and also in the central Lower



Peninsula, with a connection between the Bay City/Saginaw area and the Mt. Pleasant and Big Rapids area.

Passenger and Freight Rail Programs

The OOR administers MDOT's rail and port programs, which are primarily supported with annual CTF appropriations. This 5YTP was developed based on the FY 2020 annual program and the estimated funding for the remaining years. OOR scales its efforts annually to fit available funding. Most of OOR's ongoing expenditures will be for intercity passenger rail service, with costs that are calculated annually. Additional investments will be made through other annual programs that are either application-based or identified through an annual prioritization process.

MDOT's passenger and freight rail program investments will include state and federal funds to preserve and enhance Michigan's passenger and freight rail systems, ensure railroad crossing safety and promote economic development. MDOT has benefitted from significant federal grants in prior programs and will continue to compete for additional funding, as appropriate, to continue its efforts to enhance this system. This 5YTP will include continued participation in a multi-state federal grant that will replace train equipment on all three Michigan routes.

MDOT's passenger and freight rail program investments will utilize CTF, MTF and dedicated federal-aid funds to preserve and enhance Michigan's passenger and freight rail systems, ensure railroad crossing safety and promote economic development. CTF funds are the only ongoing source of revenue for MDOT's passenger and freight rail efforts, with a \$14.8 million increase in CTF funding anticipated in FY 2020 for these activities. CTF funding is projected to return to levels slightly higher than FY 2019 and remain relatively constant through FY 2024. Dedicated federal-aid and MTF funds support motorist safety at railroad crossings on local roads, which will see a slight increase in FY 2020. MDOT

will continue to compete for federal funding to assist with rail capital enhancements, which may require additional state revenues to match federal funds in order to take advantage of these opportunities. STF dollars and corresponding dedicated federal funds support a trunkline crossing program that is invested as a part of the rail program, but those funds are accounted for as a part of the Highway Program.

The bulk of MDOT's investment in rail will be to preserve and enhance Michigan's intercity passenger rail services, as mandated by federal statute or existing contractual arrangements. Under the Passenger Rail Investment and Improvement Act of 2008 (PRIIA), MDOT is responsible

for providing operating support for the three Michigan intercity routes that serve 22 station communities. In FY 2020, MDOT plans to invest \$20 million for Amtrak's operation of these three routes.

Investments on the state-owned corridor between Kalamazoo and Dearborn will focus on what is needed to meet the federal grant requirements associated with the purchase and initial investments in the corridor. Requirements include achieving and maintaining passenger train speeds of up to 110 mph. In FY 2020, MDOT plans to invest \$45 million for maintenance and capital improvements on the state-owned Kalamazoo-Dearborn corridor.

Remaining CTF dollars will be strategically invested in state-owned freight line preservation and freight economic development, while dedicated MTF and federal dollars will be invested in safety enhancements at railroad crossings. Specific projects will be identified annually based on available funding, but FY 2020 generally will include:

- Preservation of freight service on state owned corridors through capital repairs, including track and bridge work. In





addition to the investments on the state-owned corridor between Kalamazoo and Dearborn, MDOT plans to invest approximately \$6.3 million in track and bridge work on its other state-owned corridors in FY 2020.

- Low-interest loans through the Freight Economic Development Program to assist new or expanding businesses with access to the rail system. MDOT anticipates providing approximately \$5 million through this program in FY 2020 but actual investment could vary widely based on applications received. Capital work on the state-owned corridors will be scaled back, if necessary, to accommodate a larger demand for this program than anticipated.
- Providing \$10 million in matching funds to leverage federal and private dollars in an effort to preserve freight service on state-owned and/or privately owned corridors.
- Safety projects to reduce motorist risk at crossings, including warning device enhancements and crossing elimination projects on roads under local jurisdiction. Approximately \$6 million is expected to be invested in crossing safety on local roads in FY 2020.
- A special effort to eliminate railroad crossings by relocating track on local roads and state trunklines will be undertaken in FY 2020 as a result of a one-time infusion of \$4.5 million provided under the FAST Act.

- Approximately \$3 million will be invested in FY 2020 through a competitive program for railroad crossing surface improvements on roads on the local system.
- Projects on the state trunkline system designed both to improve crossing surfaces and upgrade warning devices (accounted for under the Highway Program).

MDOT plans to make approximately \$2 million in loans available for rail infrastructure preservation through the Michigan Rail Loan Assistance Program in a FY 2020 call for projects. Funding is available through a revolving fund started with prior CTF appropriations.

Beyond funding, MDOT will continue to work with stakeholders to plan and support other passenger rail projects, including planning for new stations in Ann Arbor, Port Huron, and Detroit. MDOT will also be assessing Amtrak stations for compliance with requirements of the Americans with Disabilities Act (ADA).

Port Program

For each of the next five years, MDOT anticipates providing approximately \$470,000 in legislatively appropriated funding to the Detroit-Wayne County Port Authority to assist with operating costs and marketing activities.

Aviation Program

The Federal Aviation Administration (FAA) Reauthorization Act of 2018 reauthorized the FAA and aviation programs until the end of FY 2023, including the federal Airport Improvement Program (AIP) at \$3.4 billion per year nationwide. At this time, FY 2024 funding is uncertain but is estimated to remain at current levels. The federal AIP received an additional \$1 billion in supplemental appropriations for FY 2018 through FY 2020 and, while the funding is at the discretion of the FAA, MDOT will provide suggestions and information as requested. It is anticipated that this program could provide Michigan airports an additional \$20 million over three years.

The federal Airport Capital Improvement Program (ACIP) provides funding for approximately 226 public use airports for capital improvement projects and pavement maintenance. Of the 226 eligible airports, 90 receive federal entitlement funding as part of the National Plan of Integrated Airport Systems. Most of Michigan's public use airports that receive federal entitlement funds are owned and operated by local governments; therefore, projects using these funds are selected by the airports themselves, not MDOT. However, projects are ranked according to a

priority system and the airports are encouraged to select projects that not only benefit a single airport but the entire system as well.

The current federal administration has proposed and may introduce additional infrastructure funding legislation for the next two years. While the amount that may come to Michigan airports is unknown at this time, an additional \$5 million per year may be added to the federal funding levels.

State aeronautics funding levels are an ongoing challenge but MDOT is committed to matching all federal aid. In 2015, part of the state sales tax on aviation fuel was allocated to the State Aeronautics Fund (SAF), as well as the Qualified Airport Fund. The revenue from the sales tax has never reached the amount estimated in 2015, although it has shown some growth in 2019. The lack of expected funding from the sales tax has been offset by an increase to the SAF from an airport parking tax that supports debt service for bonds issued and disbursed in the early 2000s, to be repaid through 2032. As the bond debt is paid, revenue received from the airport parking tax can be dedicated to the capital outlay budget. At this time, it is not known if there will be sufficient state aeronautics funds to fully match current federal funding.

The Air Service Program (ASP) was funded in FY 2019 at \$250,000 per year. For FY 2020, since program funding is uncertain and may be modified due to a lack of state aeronautics revenue, the ASP funding included in this 5YTP is estimated at the FY 2019 level of \$250,000. An estimated \$700 million in state and federal funds will be invested in the Aviation Program over the next five years.

The Office of Aeronautics provides supplemental funding for projects and makes decisions on which projects receive funds through the State Block Grant Program. FAA provides supplemental funding for projects at airports they select and all funding decisions regarding use of supplemental dollars are made based on the Michigan Aviation System Plan (MASP) or on published FAA priorities, as appropriate.



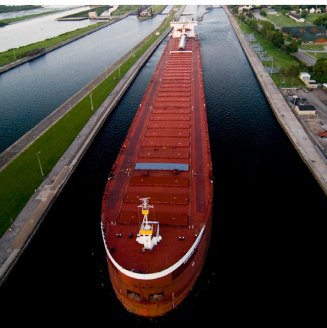


Since 2010, a lack of financial resources has increased the gap between project requests and MDOT's ability to fund those projects. This gap has fluctuated between \$40 million and \$60 million annually and is due to the increased cost of delaying and phasing projects. This difference can be narrowed by discretionary and supplemental funding, which is distributed by FAA on a regional basis among various states. Michigan has been successful in the pursuit of discretionary and supplemental funds and will continue to aggressively pursue these opportunities. Additional state and other funding options will continue to be explored to address the shortfall.

The following priorities are a significant part of funding decisions that support the airport infrastructure investment strategy:

- Apply an asset management approach to reduce system and facility deficiencies.
- Preserve critical infrastructure, particularly pavements, navigational aids, and protect airspace.
- Maximize federal funds by leveraging state, local, and private funding.
- Support job growth and economic development through projects related to freight/logistics, aircraft maintenance, and other emerging opportunities.
- Support statewide efforts to attract and retain air service through the implementation of the Air Service Program.

Highlighting Upcoming FY 2020

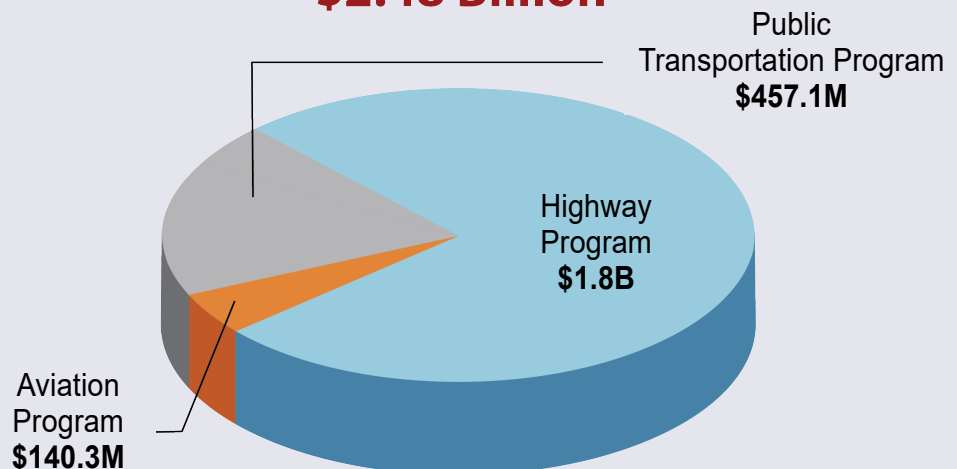


MDOT's \$2.3 billion FY 2020 program investment is a vital part of Michigan's economy, estimated to support 30,900 jobs by continuing to invest in the preservation of the transportation system, safe mobility for motorists, and efficient system operations.

Of that total investment, MDOT will dedicate approximately \$1.8 billion to system preservation, maintenance, safety, and operation of Michigan's state trunkline roads and bridges.

In FY 2020, MDOT will invest \$597.4 million in state, federal, local, and private funds to maintain Michigan's Multi-Modal Program, providing capital and operating assistance, technical support, and safety oversight of the air, passenger rail, rail freight, marine and port, and local and intercity bus sectors of Michigan's transportation system.

FY 2020 MDOT Transportation Program \$2.48 Billion



MDOT FY 2020 Transportation Program

Highway Program Revenue Assumptions

The announced FY 2020 Highway Program investment is consistent with anticipated federal and state revenues. It is projected that approximately \$838 million in federal funding will be available in FY 2020 for the highway capital program. The estimated state transportation revenue available for the FY 2020 trunkline capital program and routine maintenance totals \$815 million, after allowing for the state portion of debt service. The state revenue estimate is based on the Michigan Department of Treasury forecast for the STF, which includes revenue for state trunkline routine maintenance.

Public Transportation Program Revenue Assumptions

The FY 2020 Public Transportation Program (bus, marine, passenger rail, freight rail, and port programs) is based on the state FY 2020 budget, and includes federal, state, local, and private revenue. The FY 2020 program budget includes \$358.7 million of CTF as well as \$98.4 from other federal, state, and local sources, for a total FY 2020 program of \$457.1 million. This is comprised of Department of Treasury's Office of Revenue and Tax Analysis (ORTA) revenue estimates and estimated unreserved CTF fund balance at the end of FY 2019. The FY 2020 CTF program appropriation is approximately 8 percent more than the FY 2019 CTF appropriation. The Public Transportation Program's revenue assumptions include more than \$69 million of federal spending authority for potential federal grants to MDOT. The rail program's revenue assumptions also include a continuation of dedicated federal and MTF funding allocations for rail crossing programs at FY 2019 levels.

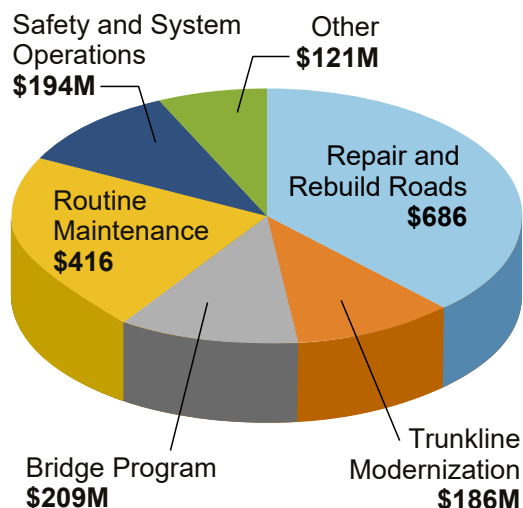
Aviation Program Revenue Assumptions

The FY 2020 Aviation Program is based upon the most current estimates available. The Office of Aeronautics' ongoing federal aid is projected to increase or remain unchanged for FY 2020 from FY 2019's level. Another \$20 million in discretionary funding may come to Michigan in the form of federal grants through the AIP. It is estimated that \$140.3 million in state and federal aviation funds will be available to be invested in FY 2020 at this time.

Interested in an MDOT project? Please go to the project list starting on page 53
or go to the MDOT website at www.Michigan.Gov/MDOT5YearProgram

MDOT FY 2020 Transportation Program

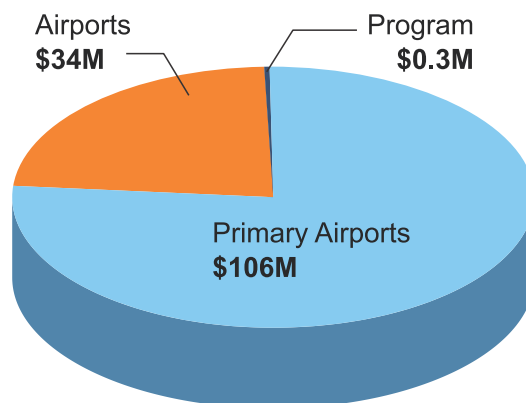
FY 2020 Highway Program \$1.8 Billion



Highway Program Investment Strategy

- The FY 2020 Road Rehabilitation and Reconstruction category investment of \$686 million includes:
 - 498 lane miles of reconstruction and rehabilitation.
 - 1,563 lane miles of capital preventive maintenance.
 - 418 lane miles of freeway and non-freeway resurfacing.
- The Bridge Program includes replacement, rehabilitation, and capital preventive maintenance, totaling \$209 million.
- The Trunkline Modernization Program totals \$186 million, including the I-75 modernization project in Oakland County and the I-94 modernization project in Wayne County.
- Routine maintenance activities will total an estimated \$416 million.
- The Safety and Systems Operations category includes signs, pavement markings, traffic signals, operational improvements, and other programs that support the safe and efficient operation of the system, at a total investment of \$194 million.
- The Other category includes investment in nonmotorized facilities/streetscapes, recreational trails, roadside facilities, workforce development, and other state and federally funded programs, for a total of \$128 million, and includes a \$39 million federal BUILD grant and required state matching funds for the US-31 freeway project in Berrien County.

FY 2020 Aviation Program \$140.3 Million



Aviation Program Investment Strategy

Priorities are a significant part of the funding decisions that support the organizational mission, and represent the overall vision of the Office of Aeronautics, driving the airport infrastructure investment strategy. The Office of Aeronautics' commitment to becoming more efficient and reducing overhead in program administration has resulted in a new project closeout process that is expediting and streamlining project completion and final payments.

For FY 2020, an estimated \$140.3 million in state and federal funding will be invested in the Aviation Program.

For the Office of Aeronautics, priorities include:

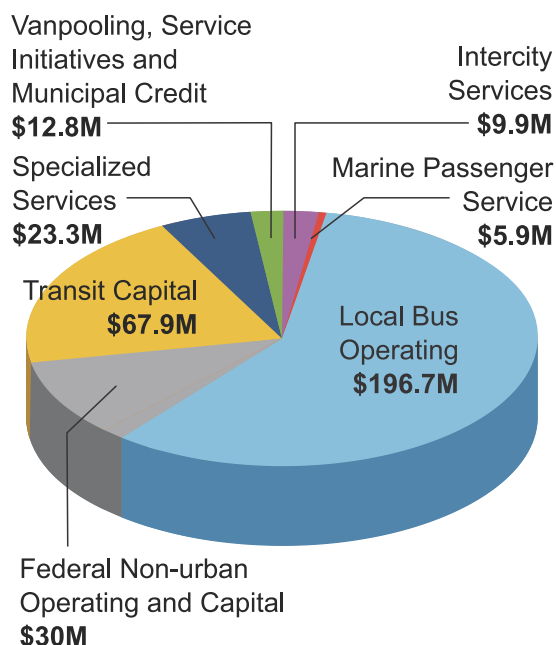
- Application of an asset management approach to reduce system and facility deficiencies.
- Preservation of critical infrastructure, particularly pavements, navigational aids, and protected airspace, with a focus on the goal to maintain 90 percent of all Tier I Airport Primary Runways in good or fair condition.
- Leveraging state, local, and private funding to maximize federal funds.
- Support of job growth and economic development through projects related to freight/logistics, aircraft maintenance, and other emerging opportunities.
- Support of statewide efforts to attract and retain air service through the implementation of the ASP.

Totals in charts shown in millions.

MDOT FY 2020 Transportation Program

Public Transportation Program

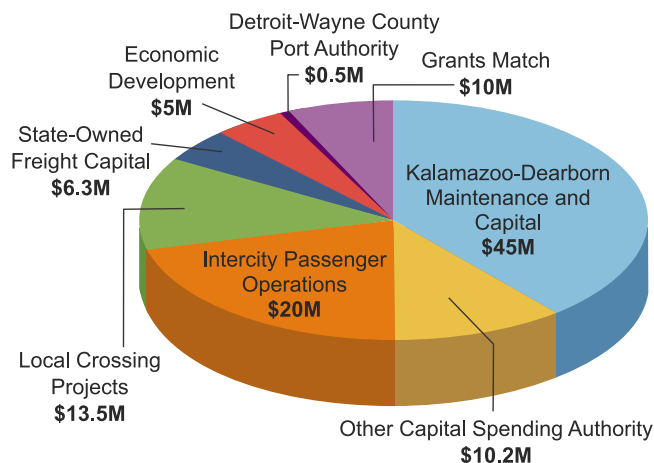
FY 2020 Bus and Marine Programs \$346.5 Million



Bus and Marine Programs Investment Strategy

- Act 51 defines how the CTF will be expended.
- More than 82 million public transit trips in FY 2018.
- Preservation of existing local transit and marine services, including:
 - 78 local bus agencies.
 - Four passenger ferry systems.
 - 38 specialized service providers.
- Preservation of state-subsidized intercity bus service, including:
 - Five MDOT-contracted routes.
 - One demonstration-contracted route using only federal and private funds.
 - One interstate route jointly funded with WisDOT.
 - Four intercity bus/rail passenger transportation facilities.
- Preservation and maintenance of existing infrastructure.
- Limited funding for regional mobility improvements.

FY 2020 Rail and Port Programs \$110.5 Million



Rail and Port Programs Investment Strategy

- Passenger Rail
 - Amtrak operating support for three Michigan corridors.
 - Maintenance efforts on the Kalamazoo-Dearborn corridor.
 - Capital improvements on the Kalamazoo-Dearborn corridor that enhance and increase ridership.
- Grade Crossing Safety
 - Local roads: warning device enhancements at 40-60 locations.
 - Local roads: crossing surface improvements at 40-50 locations.
 - State trunkline: crossing surface improvements and/or device upgrades at 20-25 locations (funding reflected within Highway Capital Program).
 - Local road and state trunkline: special push on crossing eliminations through track relocation (related to FY 2017 influx of federal grade crossing dollars).
- Freight Rail
 - Capital investments in the state-owned system.
 - Provide matching funds to leverage federal and private investments to preserve and improve freight service to rail customers.
 - Support new/expanding businesses through Freight Economic Development Program.
 - Conduct calls for projects under Michigan Rail Loan Assistance Program (MiRLAP) as funding allows.
- Port Development
 - Provide operating assistance to the Detroit-Wayne County Port Authority for administrative and marketing expenditures.

Performance Measures and Goals

Maintaining and growing Michigan's economy depends on the preservation, modernization, and efficient operation of its transportation system. To achieve the goals that have been set forth, it is necessary to benchmark and monitor the performance of the system.



Federal Transportation Performance Measures

Current federal transportation legislation (the FAST Act) required that state and metropolitan areas adopted, by 2018, a performance-based planning process in support of national goals in the areas of safety, pavement and bridge condition, system performance, and transit asset management.

In order to adhere to that requirement, MDOT established implementation teams, each responsible for developing strategies and timelines to ensure compliance with the federal Transportation Performance Measures (TPMs) and targets. These strategies are to be used to guide investment priorities and inform project selection. The TPM teams report to a core team that ensures the strategies and targets are reported to and approved by MDOT executives. The MDOT teams established targets for each of the measures in 2018, and they are being incorporated into the SLRTP and the State Transportation Improvement Program, as required.

Highway Condition Goals

MDOT formalized its approach to improving, measuring, and reporting the condition of its transportation network with the 1997 adoption of pavement condition goals by the STC.

The key performance measure for highway pavement used by MDOT is called Remaining Service Life (RSL), defined as the estimated number of years until it is no longer cost effective to perform preventive maintenance on a pavement section. When pavements reach an RSL of two years or less, they are considered "poor," meaning they should be considered for rehabilitation or reconstruction (R&R). Prior to reaching this rating, preventive maintenance can be applied using an asset management approach by applying the right mix of fixes at the right time to extend the life of the pavement.

RSL Categories and Ratings

Category	Amount RSL	Ratings
I	0-2 years	Poor
II	3-7 years	Fair
III	8-12 years	Good
IV	13-17 years	Good
V	18-22 years	Good
VI	23-27 years	Good
VII	28-32 years	Good

MDOT's highway condition goal is to maintain 90 percent of pavement in good or fair condition. The graph below represents historic state trunkline system condition based on RSL.

In 2007, MDOT surpassed its goal of 90 percent of pavement in good or fair condition and maintained this condition through 2010. Since 2011, the pavement deterioration rate has been about 1 percent per year and is forecasted to accelerate considerably in the coming

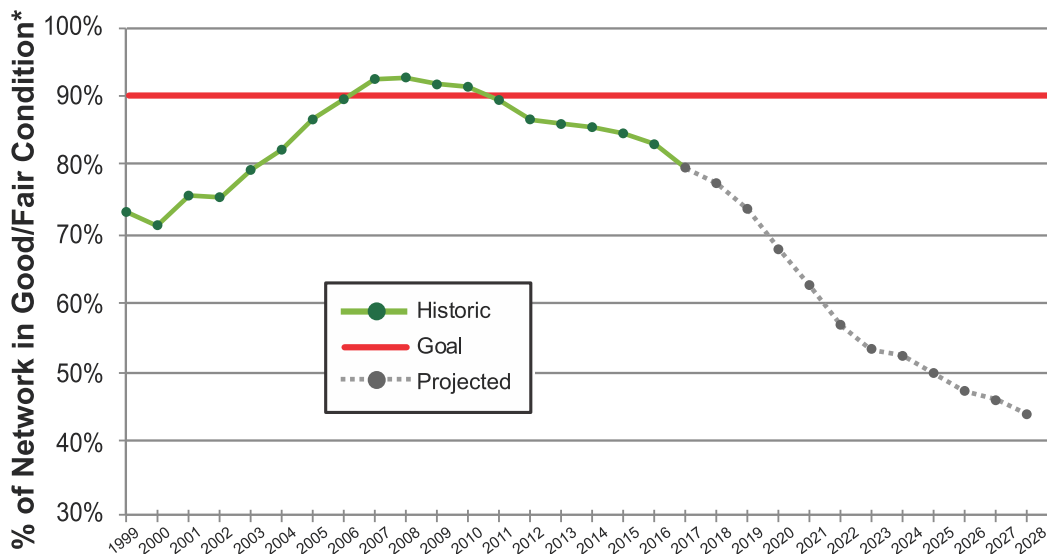
years. Additional revenue from increases to the state gas tax and vehicle registration fees have helped to slow pavement deterioration but projections indicate these funds are not enough to meet pavement goals in future years, or to even sustain current conditions.

The pavement condition measure (PCM) introduced by the FAST Act attempts to provide a standardized national snapshot of pavement surface condition across all states. The new federal PCM is a composite measure in that it determines pavement surface condition through an index of four pavement metrics, including roughness, cracking, faulting and rutting.

While the new federal PCM provides a starting place to measure the surface condition of the federal highway system, MDOT's established RSL condition measure provides a more robust assessment of pavement health that considers the structural integrity of the pavement, along with a significant amount of contextual data regarding the pavement's history. Because of this contextual and structural data, RSL is considered a dynamic, detailed and tactical measure that more

completely evaluates the long-term health of pavement. While the TPM implementation teams will aid in identifying opportunities for the use and development of the new federal measure, MDOT will continue to rely on RSL to determine how to invest in its infrastructure in a way that achieves the greatest benefit for system health overall.

MDOT Historic Trunkline Pavement Condition



Source: MDOT, BTP, SSMS, as of Feb. 22, 2018

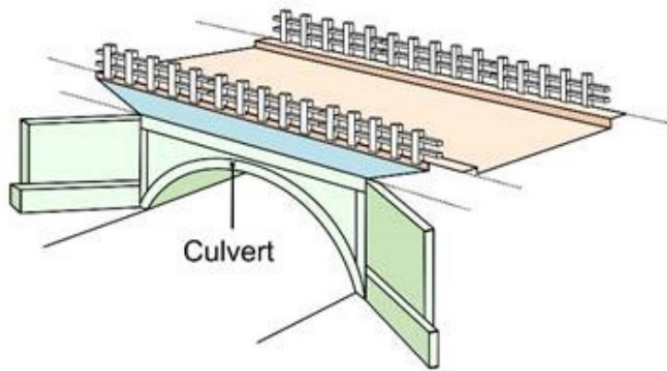
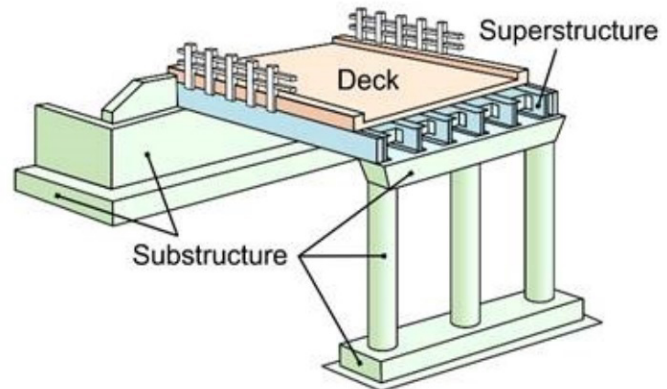
*Based on remaining service life

Bridge Condition Goals

MDOT's Bridge Management System (BMS) is an important part of the asset management approach used by the department to keep infrastructure in the best condition possible. BMS is a strategic approach to linking data, strategies, programs, and projects into a systematic process to ensure desired results.

An important tool within BMS is the Bridge Condition Forecasting System (BCFS), which uses current bridge conditions, bridge deterioration rates, project costs, expected inflation, and fix strategies to estimate the future condition of the state trunkline bridge system.

Condition ratings are based on a 0-9 scale and assigned for the deck, superstructure and substructure of each bridge, or as an overall rating for bridge-length culverts. These ratings are recorded in the National Bridge Inventory (NBI) database and are an important tool for transportation asset management, as they are used to identify preventive maintenance needs, and to determine rehabilitation and replacement projects that require funding.

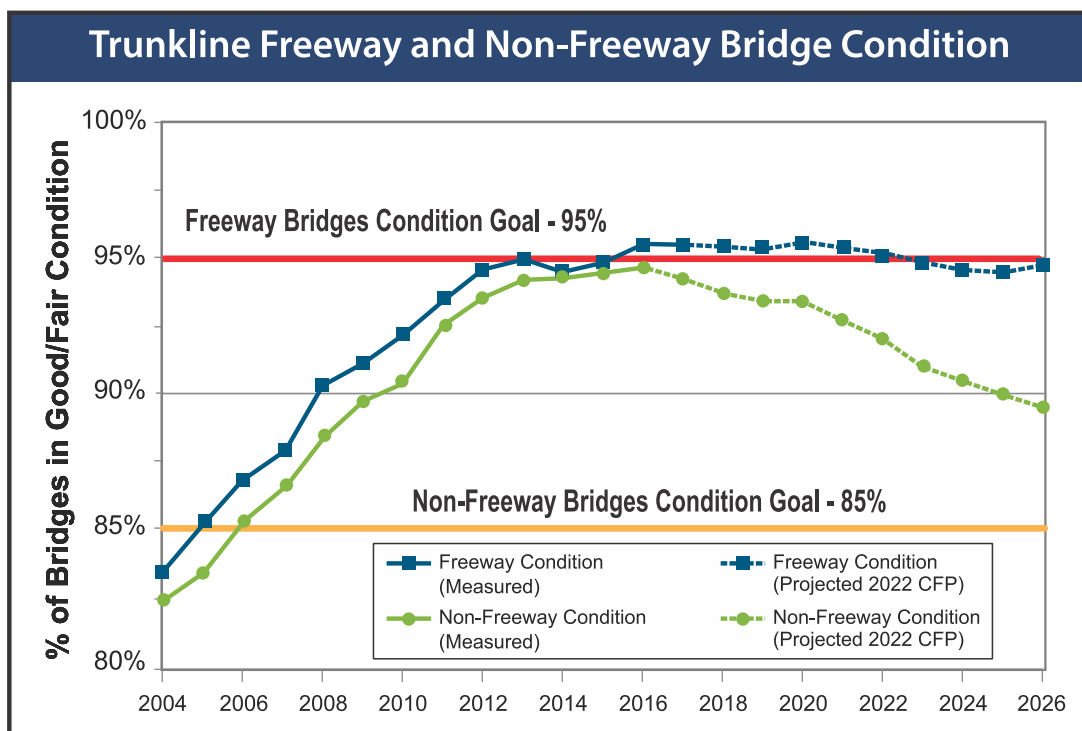


NBI Condition Ratings

7-9	Good Condition	Routine maintenance candidate.
5-6	Fair Condition	Preventive maintenance and minor rehabilitation candidate.
4	Poor Condition	Major rehabilitation or replacement candidate.
2-3		Emergency repair or high-priority major rehabilitation or replacement candidate. Unless closely monitored, it may be necessary to close until corrective action can be taken.
0-1		Major rehabilitation or replacement candidate. Bridge is closed to traffic.

MDOT's bridge condition goal is to maintain 95 percent of freeway bridges in good or fair condition and 85 percent of non-freeway bridges in good or fair condition.

As shown in the chart below, MDOT has met and sustained the non-freeway bridge goal of 85 percent good or fair condition since 2006. Freeway bridge conditions were close to 95 percent good or fair at the end of 2013, declined slightly in 2014 and 2015, but increased again in 2016 and met the condition goal of 95 percent at the end of 2016. However, projections indicate that, without additional funding, the freeway bridge condition will decline and will again fall below the freeway bridge goal.



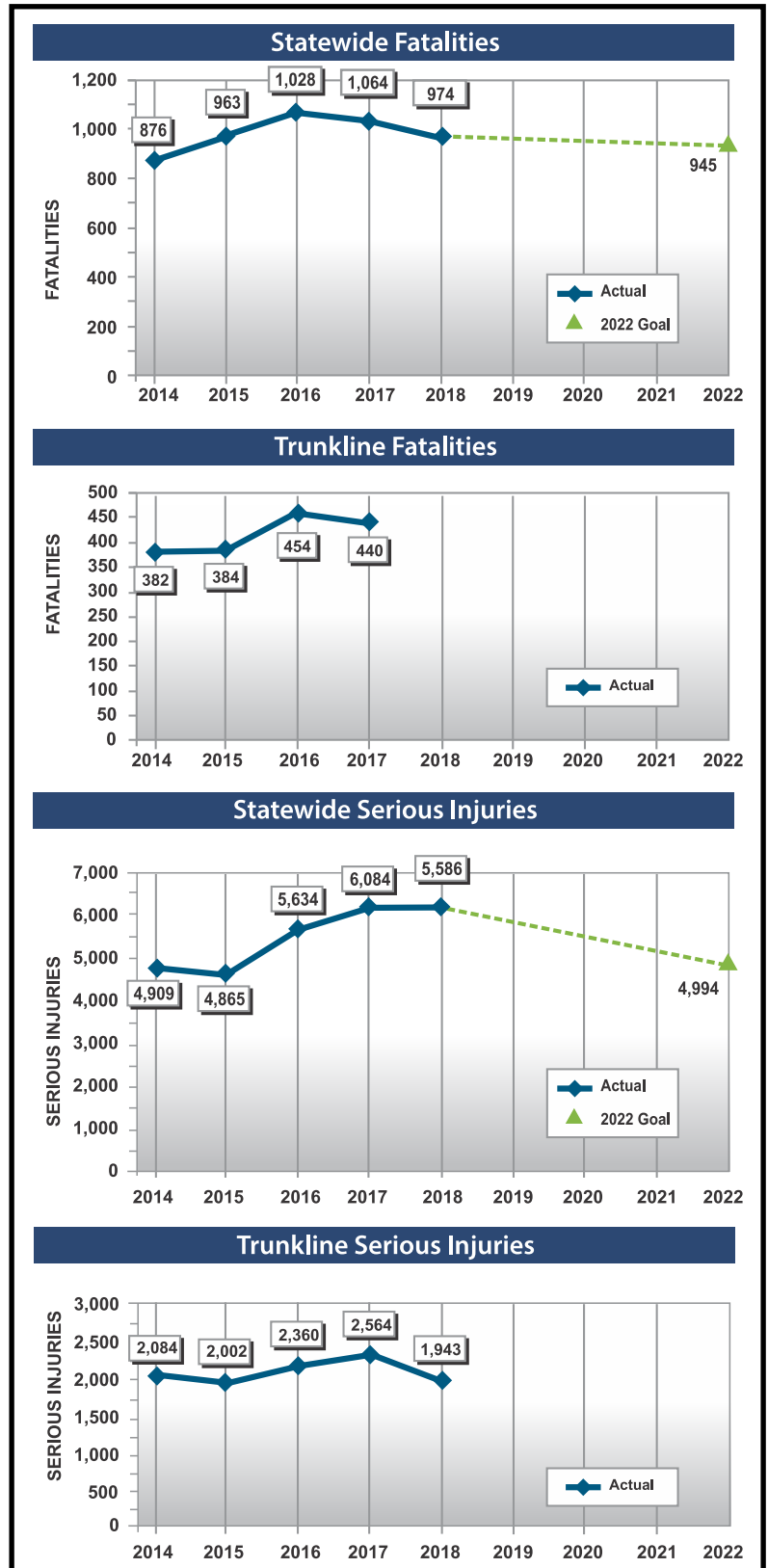
Safety Goals

MDOT's safety goal is to reduce fatalities and serious injuries on the state trunkline system in support of the Michigan Strategic Highway Safety Plan (SHSP) and the department's efforts of achieving the vision of Toward Zero Deaths (TZD). MDOT's vision is TZD with the ultimate goal to reduce fatalities to zero and minimize serious injuries. In 2018, there were 440 fatalities and 1,943 serious injuries reported on the state trunkline system. In 2019, the SHSP goals were revised to reduce fatalities from 974 in 2018 to 945 in 2022 and reduce suspected serious injuries from 5,586 in 2018 to 4,994 in 2022 statewide.

To meet the TZD goal, the strategy of the MDOT Safety Program is to select cost-effective safety improvements, as identified in the SHSP, to address trunkline locations with correctable fatality and serious injury crashes. Improvements identified will support the key focus areas of the SHSP.

The purpose of the SHSP is to identify key safety needs in the state and guide investment decisions that achieve significant reductions in highway fatalities and serious injuries. The SHSP identifies four broad emphasis areas: high-risk behaviors, at-risk road users, engineering infrastructure, and system administration. Of these areas, engineering infrastructure is predominantly addressed by the department's Safety Program through intersection safety and lane departure projects. In addition, pedestrian and bicycle safety improvements are the department's emphasis for at-risk road users.

To the right are statewide and trunkline graphs that compare the actual values of fatalities and serious injuries compared to the 2022 SHSP goals.



Multi-Modal Performance Measures

New program requirements included in MAP-21 pertaining to transit asset management and transit safety planning and related performance measures are now in place. For transit, MDOT was required to develop performance measure targets for rural area transit service operations in response to FAST Act provisions. MDOT, through its Office of Passenger Transportation (OPT), officially adopted a Transit Asset Management Plan (TAMP) in October 2018 that included FY 2019 targets for Federal Section 5310 and Section 5311 subrecipient agencies of the state. There were no comparable federal requirements for rail and aviation.



Public Transportation Program

Local and Intercity Bus

OPT considers many factors when planning the investment strategy for its programs. Two primary performance measures considered are the condition of the rural local bus fleet and the the local bus level service, while intercity bus considers reasonable access.

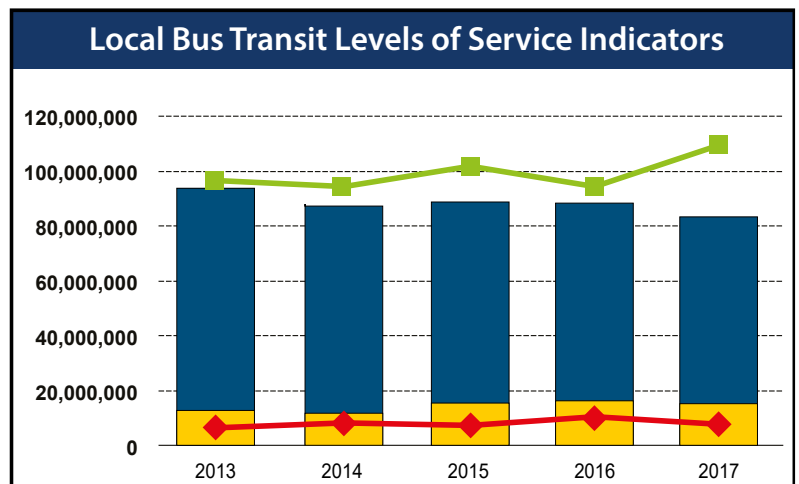
It is important to note that MDOT does not own or control local bus service levels, nor does it own or control the intercity bus network. The state and federal funding that MDOT uses to support local bus and intercity bus is only a portion of the total cost of operating and maintaining the service. While MDOT has established performance measures for these modes to help guide investment decisions, MDOT cannot, on its own, ensure that the performance measures are met.

Local Bus Level of Service

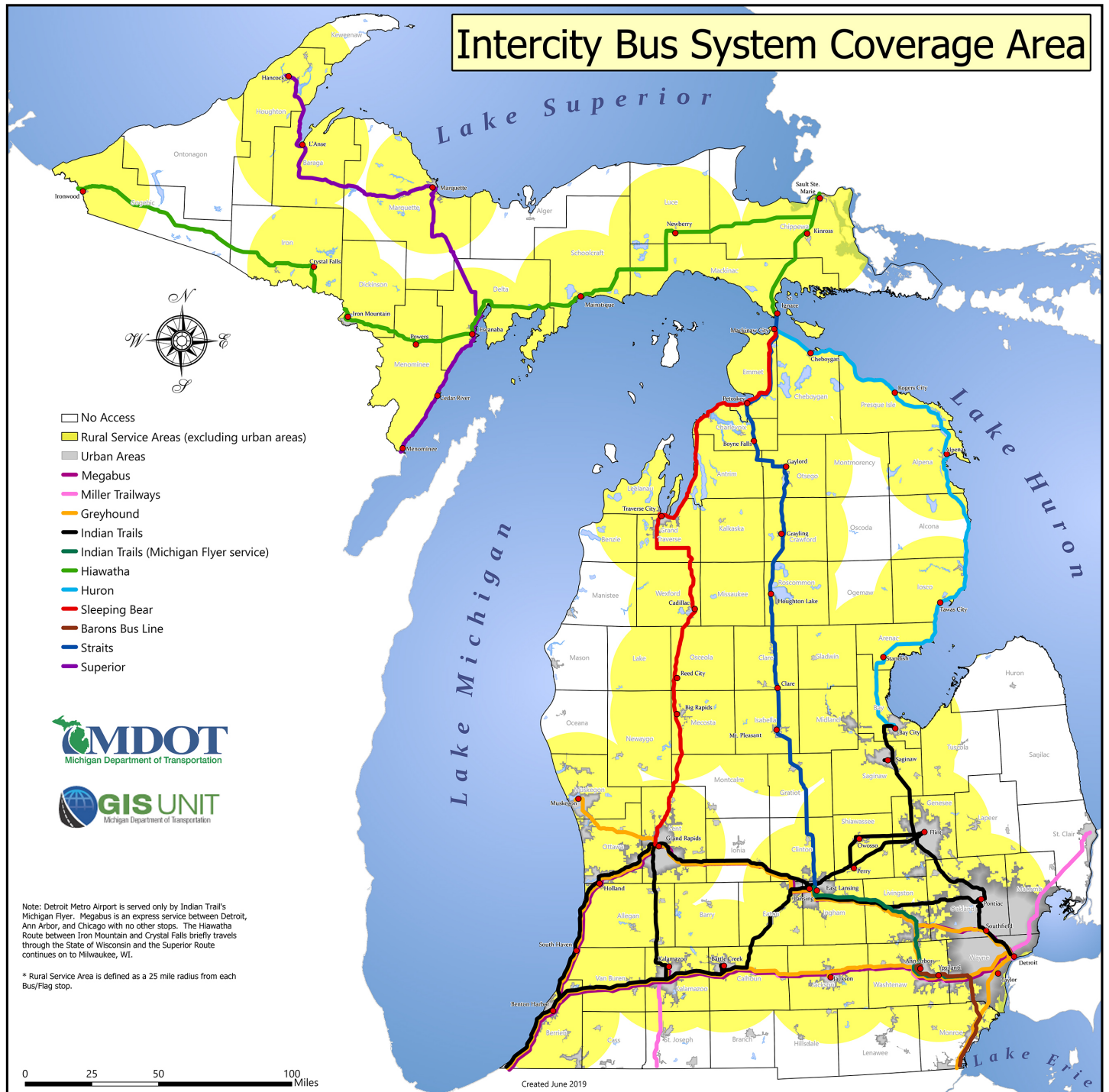
The local bus level of service is measured using total annual hours and miles of service and total annual passenger trips, considering elderly/disabled passenger trips as a subset of the total. The goal is to preserve service levels and continue providing service in all 83 counties. Local agencies continue to innovate to increase their service levels. MDOT is hopeful that this innovation in combination with the slight increase in state operating assistance will show positive results over the life of this five-year program.

Intercity Bus

The factor used to determine the investment strategy for intercity bus service is to provide reasonable access to intercity bus service in rural areas where connectivity to the national transportation network is often difficult to attain. MDOT's goal is to preserve the existing level of service, which has 81 percent of the rural population within 25 miles of an intercity bus stop. The national average is 78 percent.



	2013	2014	2015	2016	2017
Passenger Trips Total (excluding marine)	89,444,565	89,692,521	89,380,345	83,716,947	81,792,821
Elderly and Disabled Passenger Trips (as subsets of total -excluding marine)	12,269,803	12,727,836	12,999,471	12,999,471	11,833,680
Hours of Service (excluding marine)	6,717,358	6,470,836	8,371,898	6,940,453	7,090,325
Miles of Service (excluding marine and specialized services)	96,770,436	101,523,828	94,670,531	109,152,183	106,819,546



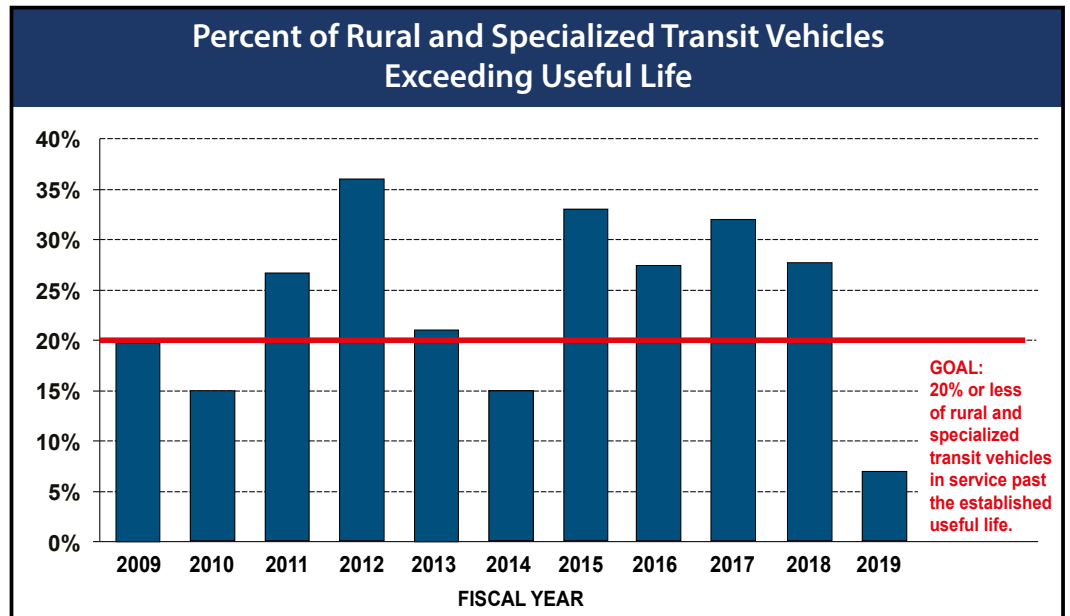
Intercity Bus Performance Measure

The factor used to determine the investment strategy for intercity bus is to provide reasonable access to intercity bus service in rural areas where connectivity to the national transportation network is often difficult to attain. MDOT's goal is to preserve the existing level of service, which has 81 percent of the rural population within 25 miles of an intercity bus stop. The national average is 78 percent.

Rural Bus Fleet Condition

The condition of the rural bus fleet is based on the percent of vehicles past their useful life. The goal is to have less than 20 percent of the rural fleet beyond useful life. That goal was achieved in 2014 due to a combination of federal State of Good Repair grants and the fact that fewer vehicles were eligible for replacement that year.

In 2016, the percentage went back up to 36 percent of the eligible fleet unfunded. One of the factors contributing to the increase in these numbers is that many of the buses previously put into service with federal funding from the American Recovery and Reinvestment Act (ARRA) have now reached their useful life and are eligible for replacement.



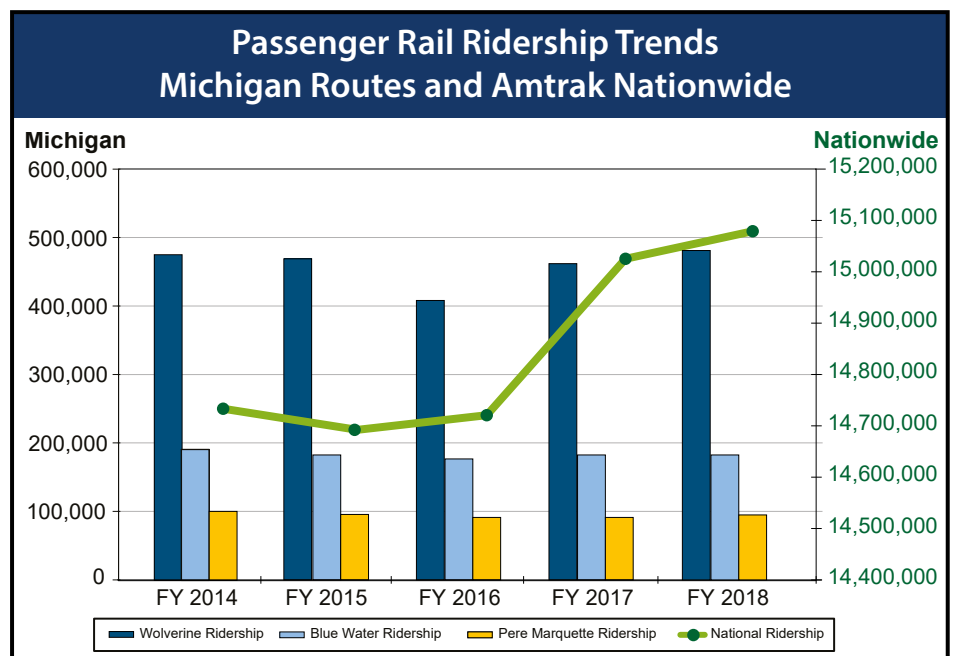
MDOT continues to submit annual applications to the FTA under the new Buses and Bus Facilities competitive program in the FAST Act in hopes of improving and stabilizing fleet condition.

Passenger and Freight Rail

The Office of Rail has identified two rail-related goals for inclusion in MDOT's performance measurement efforts: the number of passengers using state-supported passenger rail service and the railroad crossing surface condition on the state trunkline system.

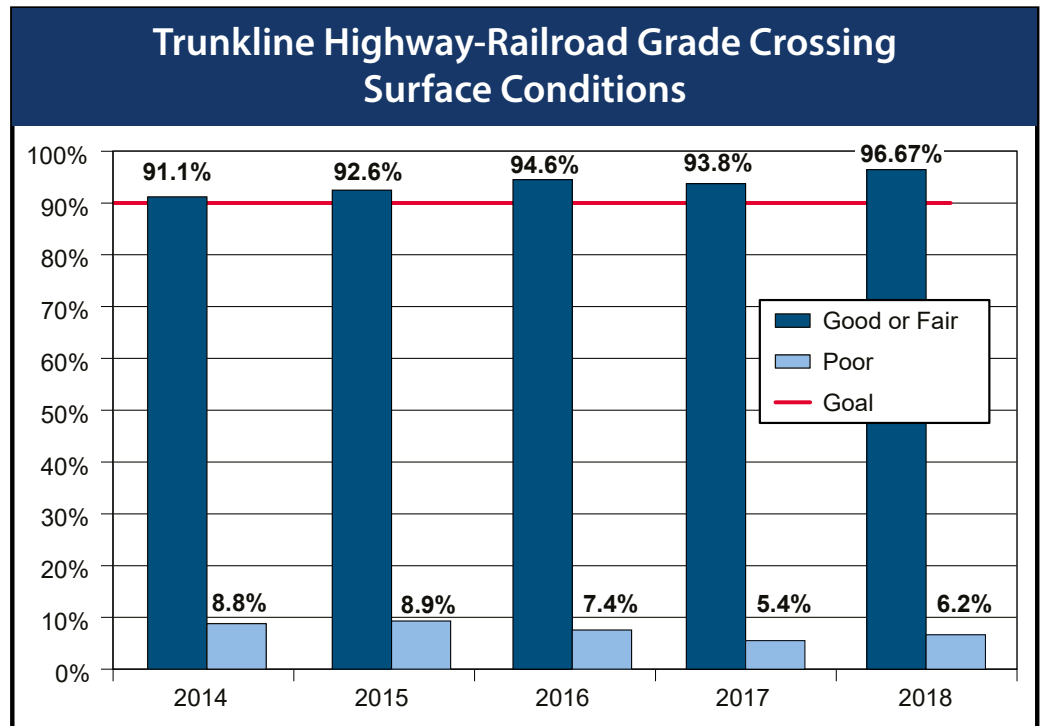
Passenger Rail Ridership

MDOT tracks the total number of passengers using state-supported passenger rail services, with a goal of maintaining ridership consistent with (within 10 percent) or better than national trends. MDOT is meeting its goal.



Railroad Crossing Condition

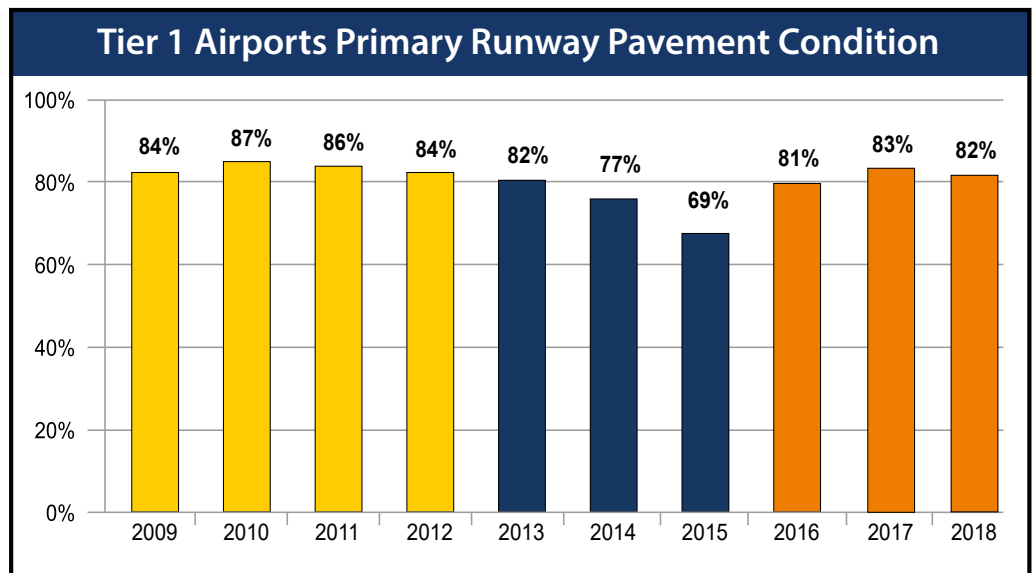
MDOT also tracks the railroad crossing surface condition on the state trunkline system, with a goal of at least 90 percent in good or fair condition. The percentage of the railroad crossing surfaces on the state trunkline system in at least fair condition continues to increase. At the end of FY 2018, 96.7 percent of the crossing surfaces were in good or fair condition.



Aviation Program

The Office of Aeronautics updated its MASP in 2017. As part of the update, new statewide system goals, as well as individual airport facility goals, were developed.

The current primary performance measurement goal is to maintain 90 percent of all Tier 1 Airport Primary Runways in good or fair condition, as determined by Pavement Condition Index (PCI) inspections, in alignment with MDOT highway pavement condition goals. The latest inspections show that the achievement rate toward the current goal is 82 percent, based on 2018 data.



- Pavement in "Good or Better" condition, as determined by former PCI rating methodology.
- Transition Period - Pavement evaluation methodology was revised in 2014, resulting in an overall decrease in PCI number.
- Pavement in "Good or Fair" condition, as determined by current PCI rating methodology.

Transportation Funding Supports Michigan Jobs

Highway Program Economic Impacts

Highway infrastructure investment is a vital part of the department's strategy for economic development. An efficient highway system in good condition plays an integral role in supporting the economy of the state. In order to assess the economic impact of the FY 2020–FY 2024 Highway and Bridge Program, MDOT uses the Michigan Benefits

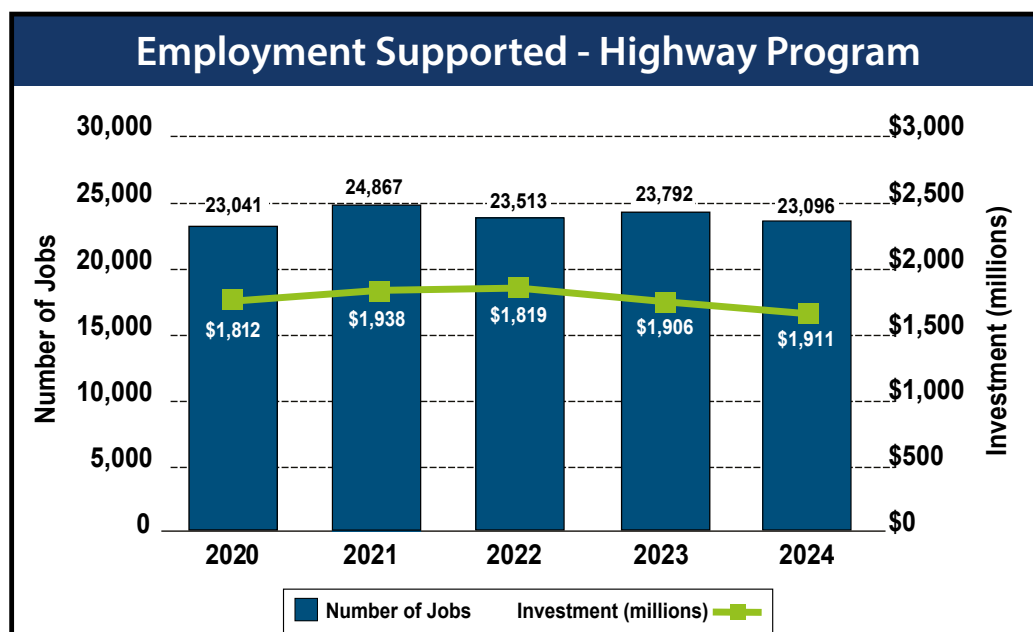
Estimation System for Transportation Tool (MI BEST Tool), the Regional Economic Models, Inc. (REMI) and the University of Michigan's calibration of REMI's standard control to evaluate the investment outcomes.

This analysis includes the economic impacts of capital and operations investment in highway and bridges program and the economic benefits derived from the travel efficiencies. The travel efficiencies were assessed by using the statewide Travel Demand Model to evaluate changes of traffic data in vehicle miles traveled (VMT) and vehicle hours traveled (VHT) based on build and no-build scenarios of the proposed five-year projects.

The following table and chart display statewide economic impacts of MDOT's FY 2020–FY 2024 Highway Program Investments.

Economic Impacts of FY 2020-2024 Highway Program Investments

	2020	2021	2022	2023	2024	Total
Investment (million \$)	\$1,812	\$1,938	\$1,819	\$1,906	\$1,911	\$9,386
Employment Impact (jobs)	23,041	24,867	23,513	23,792	23,096	118,309
Gross State Product (million '19 \$)	\$1,980	\$2,196	\$2,127	\$2,198	\$2,176	\$10,677
Real Personal Income (million '19 \$)	\$1,551	\$1,747	\$1,748	\$1,844	\$1,869	\$8,759



Public Transportation Economic Impacts

Local Bus Program

Transportation investments are a vital part of the state's overall economic development strategy. More than 100 million trips are made annually on local buses in Michigan. While the direct benefits of these services to their users are clear, it can be shown that the overall benefits of these trips extend beyond the riders. Through improved mobility, safety, air quality, and economic development, these services also benefit users of the roadway network and the community at large. Many of these trips satisfy the mobility needs of numerous households for whom owning and driving a vehicle is not an effective or affordable transportation option. As a result, there are societal benefits that result from providing essential mobility.

To assess the economic impacts of the FY 2020-2024 Local Bus Program, MDOT staff used the MI BEST Tool and the REMI to evaluate the investment outcomes.

The resulting economic impacts reflect the statewide \$1.6 billion investment for the Local Bus Program in this 5YTP. This program will support an average of 5,614 jobs annually and add \$2.5 billion in real personal income and \$2 billion in gross state product for this five-year period. In this analysis, the spending-only impacts of capital and operations investment in public transportation were considered.

The following table displays economic impacts of MDOT's FY 2020-2024 Local Bus Program for the state of Michigan.



Although this analysis attempts to assess the benefits of local bus in a comprehensive manner, it does not account for the considerable additional benefits that can arise from rapid transit investments in urban areas. Therefore, the results of the model can be considered conservative. National models have shown that a dollar invested in light rail or rapid transit can return up to \$6 in economic benefits, including local economic development around transit stops.

Rail Program

Michigan's rail system has approximately 3,600 miles of track operated by 29 railroads. It carries about 21 percent of the state's freight tonnage. These commodities totaled more than \$193 billion in 2014. Rail is particularly important for the movement of heavy and bulky commodities, as well as hazardous materials. Growing healthy rail corridors is good for Michigan's economy, whether a corridor is specifically freight, passenger,

Economic Impacts of FY 2020-2024 Local Bus Program Investments

	2019	2020	2021	2022	2023	Total
Investment (million \$)	\$314	\$313	\$318	\$323	\$328	\$1,596
Employment Impact (jobs)	5,553	5,631	5,687	5,644	5,554	28,069
Real Personal Income (million '19 \$)	\$476	\$493	\$506	\$510	\$509	\$2,494
Gross State Product (million '19 \$)	\$378	\$399	\$423	\$438	\$449	\$2,087

or both. For the federally designated Chicago-Detroit/Pontiac accelerated rail corridor, MDOT will continue to improve the 135 miles of state-owned track between Kalamazoo and Dearborn. MDOT will have an opportunity to encourage and expand economic development along this corridor for both passenger and freight rail interests. In addition, as funding permits, MDOT will work with the Michigan Economic Development Corp., as well as the Michigan Department of Agriculture and Rural Development, to provide support to rail-reliant businesses throughout the state, most directly by helping provide access to the system through the Freight Economic Development Program.

Aviation Program Economic Impacts

To maintain a competitive advantage in a global economic environment, access to convenient and efficient air travel is essential. While commercial airline services are often the most recognizable facet of aviation, the fact is that general aviation accounts for 97 percent of the nation's airports. These airports support a variety of aviation activities that employ thousands of people and create millions of dollars in economic impact and benefit.

Business throughout the state depends on airports for the movement of goods and personnel. Benefits associated with airports include direct and indirect jobs, wages, and expenditures. They also include the economic ripple effects in the community, enhancing economic activities far from the airport itself. In a state like Michigan, airports serve a vital role in supporting rural communities, particularly in the Upper Peninsula.

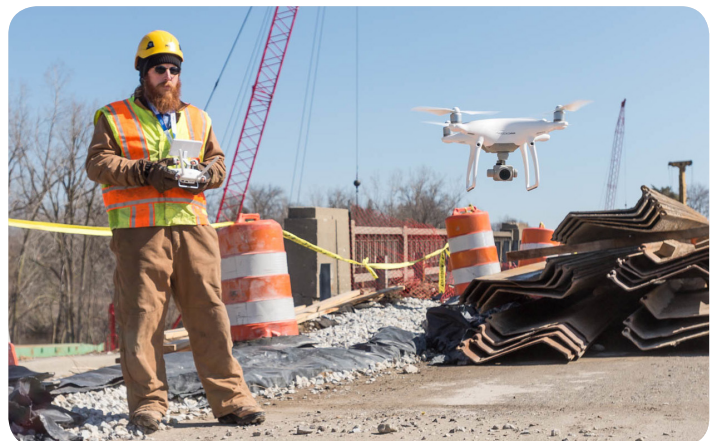
Aviation, both commercial and general, is big business in Michigan. The following data are based on information presented in the Michigan Aviation System Plan of 2017, as well as the MDOT Intermodal Management System:

- Aviation accounts for more than 183,000 jobs in the state of Michigan.

- Aviation contributes more than \$22 billion annually to Michigan's economy.
- Michigan airports serve more than 39 million passengers each year.
- Michigan airports move more than 600 million pounds of air cargo each year.

Economic benefits include expenditures made by those transient passengers who use the airport but spend money throughout the region. Airports provide savings in time and money as a result of the travel efficiencies they create. In addition, economic benefits include the intangible effect an airport has on business decisions to locate or remain in a specific area. Finally, and somewhat less tangible, are quality of life benefits provided by an airport. Examples include police and firefighting support, search and rescue, recreation, emergency medical flights, on-demand charter services, and flight instruction for future pilots.

It should be noted that technology will play an ever-increased role in aviation with expanded integration of unmanned aerial systems (UAS), or drones, across Michigan. To prepare for this emerging technology and its potential impact on the aviation regulatory framework in Michigan, the state Legislature established the Michigan Unmanned Aerial System Program Office within MDOT to spur safe integration and economic growth associated with UAS. This office will support innovative ways of approaching airspace management, airport and landing area development, and many other topics related to UAS.



Summary

This 5YTP represents a \$12.3 billion investment across all modes to be made over the five-year time period that this document covers. MDOT utilizes all available federal and state funding in order to progress toward the vision and goals set forth in the 2040 MI Transportation Plan, and continues to work toward the department-wide mission of providing the highest quality integrated transportation services for economic benefit and improved quality of life.

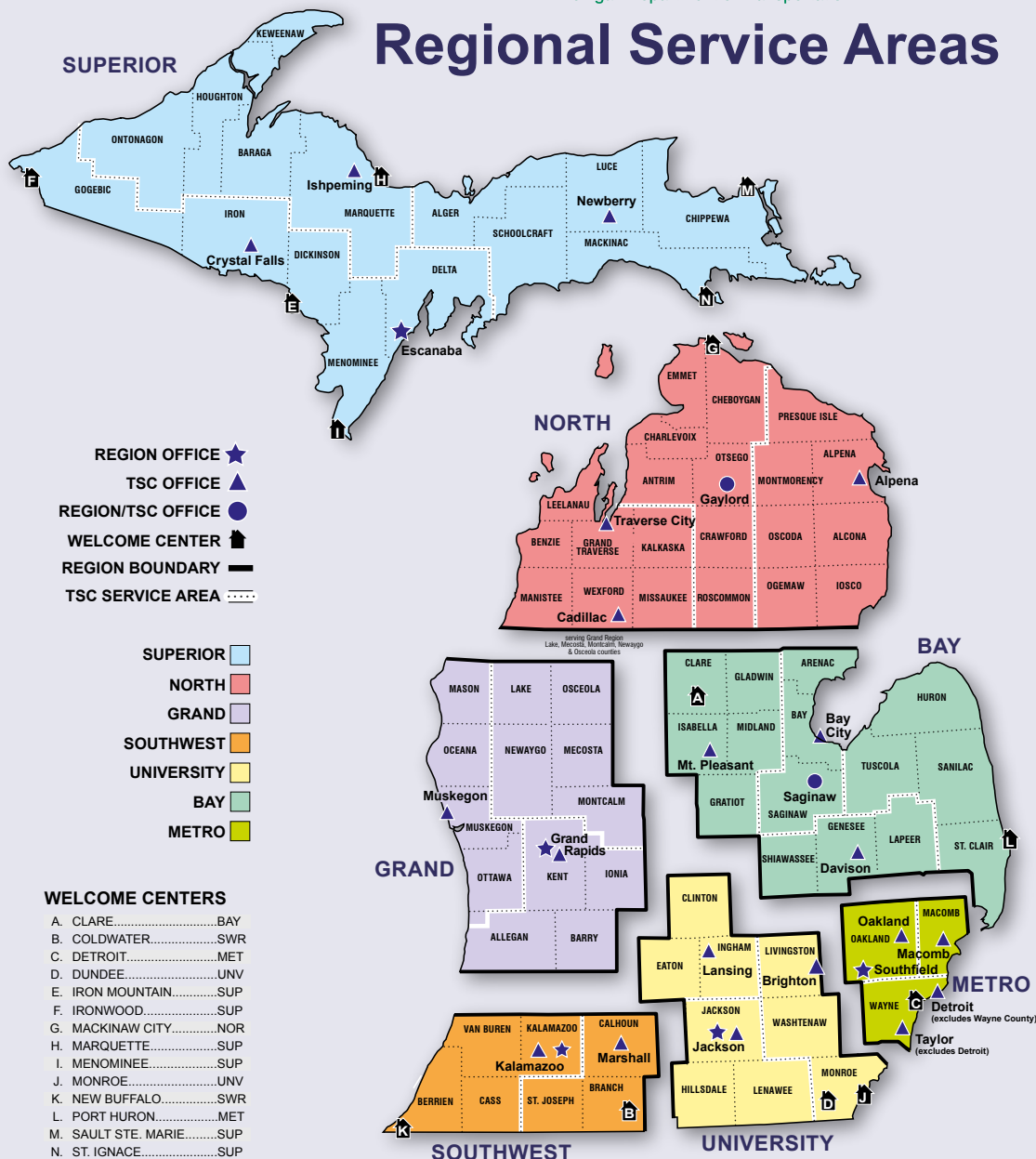


Project Lists

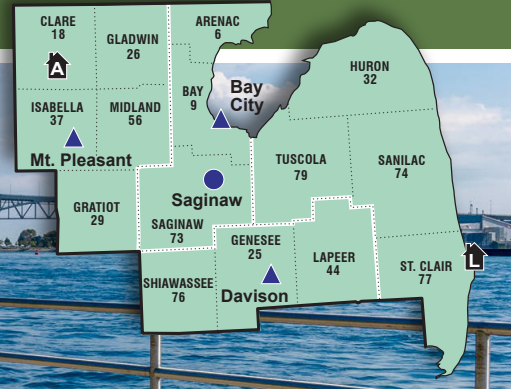
The following section contains a list of road and bridge projects, divided by MDOT region, to be constructed between FY 2020 and FY 2024. For more information, including project limits, construction length, and contact information, please visit the online interactive map at www.Michigan.gov/MDOT5YearPlan.



Regional Service Areas



BAY REGION



BAY REGION

BRIDGE - BIG BRIDGE PROGRAM

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2020	2021	2022	2023	2024
BAY	M-13 (Lafayette Bridge)	M-13 AND M-84 OVER EAST CHANNEL SAGINAW RIVER	BRIDGE REPLACEMENT		CON				
SAGINAW	I-675	I-675 OVER SAGINAW RIVER	OVERLAY - EPOXY			CON			
SAGINAW	I-675	M-58 EASTBOUND TO I-675 EASTBOUND OVER DAVENPORT AVENUE	OVERLAY - EPOXY			CON			

BAY REGION

BRIDGE - PRESERVATION

ARENAC	I-75 SB/US-23 SB	I-75 SOUTHBOUND OVER SOUTH BRANCH PINE RIVER	SCOUR PROTECTION				CON		
ARENAC	I-75 NB/US-23 NB	I-75 NORTHBOUND OVER SOUTH BRANCH PINE RIVER	SCOUR PROTECTION				CON		
ARENAC	I-75/US-23	WORTH ROAD OVER I-75	OVERLAY - EPOXY				CON		
ARENAC	I-75/US-23	US-23 OVER I-75	OVERLAY - EPOXY				CON		
ARENAC	I-75 SB/US-23	I-75 SOUTHBOUND OVER M-61	OVERLAY - EPOXY				CON		
ARENAC	I-75 NB/US-23 NB	I-75 NORTHBOUND OVER M-61	OVERLAY - EPOXY				CON		
ARENAC	I-75/US-23	US-23 RAMP F I-75 OVER I-75	OVERLAY - EPOXY				CON		
BAY	I-75	I-75 OVER HEMBLING DRAIN	JOINT REPAIR			CON			
BAY	US-10	US-10 OVER CULVER DRAIN	OVERLAY - SHALLOW					CON	
BAY	US-10	THREE MILE ROAD OVER US-10	OVERLAY - SHALLOW					CON	
GENESEE	I-475	I-475 OVER FLINT RIVER, WEST BOULIVARD AND RIVERSIDE DRIVE	OVERLAY - EPOXY		CON				
GENESEE	I-475	I-475 OVER CSX RAILROAD AND NORTHBOUND SERVICE ROAD (ABANDONED)	OVERLAY - EPOXY		CON				
GENESEE	I-475	I-475 OVER M-54 BUSINESS ROUTE (SAGINAW STREET)	OVERLAY - EPOXY		CON				
GENESEE	I-475	I-475 AND RAMP B OVER SOUTHBOUND SERVICE ROAD	OVERLAY - EPOXY		CON				
GENESEE	I-475	I-475 OVER STEVER - BROADWAY AVENUES	OVERLAY - EPOXY		CON				
GENESEE	I-475	I-475 OVER LEITH STREET	OVERLAY - EPOXY		CON				
GENESEE	I-475	I-69 OVER GTW RAILROAD	OVERLAY - EPOXY				CON		
GENESEE	I-475	I-69 OVER CSX RAILROAD, FENTON ROAD	OVERLAY - EPOXY				CON		
GENESEE	I-475	I-475 RAMP E OVER I-475 AND I-69	OVERLAY - EPOXY				CON		
GENESEE	I-475	I-475 RAMP F OVER I-69 AND I-475	OVERLAY - EPOXY				CON		
GENESEE	I-475	I-475 RAMPS G AND H OVER I-475 RAMPS E AND F, I-69 AND AND I-475	OVERLAY - EPOXY				CON		
GENESEE	I-475	FIFTH STREET, M-21 OVER I-475 AND RAMPS C AND D	OVERLAY - EPOXY				CON		
GENESEE	I-475	COURT STREET - WESTBOUND OVER I-475	OVERLAY - EPOXY				CON		
GENESEE	I-475	THIRD STREET OVER I-475	OVERLAY - EPOXY				CON		
GENESEE	I-475	SECOND STREET OVER I-475	OVERLAY - EPOXY				CON		
GENESEE	I-475	HILL ROAD OVER I-475	OVERLAY - EPOXY					CON	
GENESEE	I-475	I-475 SOUTHBOUND OVER MAPLE ROAD	OVERLAY - EPOXY					CON	
GENESEE	I-475	BRISTOL ROAD (OLD M-121) OVER I-475	OVERLAY - EPOXY					CON	
GENESEE	I-475	12TH STREET OVER I-475	OVERLAY - DEEP					CON	
GENESEE	I-475 NB	I-475 NORTHBOUND OVER MAPLE ROAD	OVERLAY - EPOXY					CON	

EPE= Study/Environmental PE=Preliminary Engineering/Design PE-B=Preliminary Engineering/Design for Bridges
 UTL=Utility work ROW=Right of way/Real Estate CON=Construction

2020-2024 FIVE-YEAR TRANSPORTATION PROGRAM

BAY REGION

BRIDGE - PRESERVATION

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2020	2021	2022	2023	2024
GENESEE	I-75	I-75 OVER BRISTOL ROAD	HEALER SEALER		CON				
GENESEE	I-75	I-75 TO I-69 RAMP B OVER GTW RAILROAD AND I-75	OVERLAY - EPOXY		CON				
GENESEE	M-57	M-57 OVER FLINT RIVER	OVERLAY - EPOXY				CON		
GENESEE	US-23 NB	US-23 NORTHBOUND OVER SHIAWASSEE RIVER	OVERLAY - EPOXY			CON			
GENESEE	US-23 SB	US-23 SOUTHBOUND OVER SHIAWASSEE RIVER	OVERLAY - EPOXY			CON			
GENESEE	US-23 NB	US-23 NORTHBOUND OVER SWARTZ CREEK	OVERLAY - EPOXY			CON			
GENESEE	US-23 SB	US-23 SOUTHBOUND OVER SWARTZ CREEK	OVERLAY - EPOXY			CON			
GENESEE	US-23 NB	US-23 NORTHBOUND OVER US-23 BUSINESS ROUTE AND GTW RAILROAD	HEALER SEALER			CON			
GENESEE	US-23 SB	US-23 SOUTHBOUND OVER US-23 BUSINESS ROUTE AND GTW RAILROAD	HEALER SEALER			CON			
GENESEE	US-23	OLD US-23 OVER US-23	OVERLAY - EPOXY			CON			
GENESEE	US-23	LAHRING ROAD OVER US-23	OVERLAY - EPOXY			CON			
GENESEE	US-23	THOMPSON ROAD OVER US-23	HEALER SEALER			CON			
GENESEE	US-23	BALDWIN ROAD OVER US-23	OVERLAY - DEEP			CON			
GENESEE	US-23	TORREY ROAD OVER US-23	ASPHALT OVERLAY W/ WATERPROOFING			CON			
GENESEE	US-23	GRAND BLANC ROAD OVER US-23	OVERLAY - EPOXY			CON			
GENESEE	US-23	HILL ROAD OVER US-23	OVERLAY - EPOXY			CON			
GRATIOT	US-127 NB	US-127 NORTHBOUND OVER MAPLE RIVER	OVERLAY - EPOXY			CON			
GRATIOT	US-127 NB	US-127 NORTHBOUND OVER NORTH BRANCH BAD RIVER	OVERLAY - SHALLOW				CON		
GRATIOT	US-127 SB	US-127 SOUTHBOUND OVER NORTH BRANCH BAD RIVER	OVERLAY - SHALLOW				CON		
HURON	M-53	M-53 OVER EAST BRANCH PIGEON RIVER	ASPHALT OVERLAY W/ WATERPROOFING		CON				
ISABELLA	US-127 NB	US-127 NORTHBOUND OVER M-20	MISCELLANEOUS BRIDGE CPM		CON				
ISABELLA	US-127 SB	US-127 SOUTHBOUND OVER M-20	MISCELLANEOUS BRIDGE CPM		CON				
SAGINAW	I-675	I-675 OVER KOEHLER DRAIN	SCOUR PROTECTION			CON			
SAGINAW	I-675	I-675 OVER MC CARRY UNIVERSAL DRAIN	SCOUR PROTECTION			CON			
SAGINAW	I-675 NB	I-675 NORTHBOUND OVER SBS RAILROAD	OVERLAY - EPOXY			CON			
SAGINAW	I-675 SB	I-675 SOUTHBOUND OVER SBS RAILROAD	OVERLAY - EPOXY			CON			
SAGINAW	I-675 NB	I-675 NORTHBOUND OVER I-75	OVERLAY - EPOXY			CON			
SAGINAW	I-675	OUTER DRIVE OVER I-675	OVERLAY - EPOXY			CON			
SAGINAW	I-675	VETERANS MEM PARKWAY OVER I-675	OVERLAY - EPOXY			CON			
SAGINAW	I-675	VETERANS MEM PARKWAY OVER I-675	ASPHALT OVERLAY W/ WATERPROOFING			CON			
SAGINAW	I-675 NB	I-675 NORTHBOUND OVER 6TH STREET	OVERLAY - EPOXY			CON			
SAGINAW	I-675 SB	I-675 SOUTHBOUND OVER 6TH STREET	OVERLAY - EPOXY			CON			
SAGINAW	I-675 NB	I-675 NORTHBOUND OVER 5TH STREET	OVERLAY - EPOXY			CON			
SAGINAW	I-675 SB	I-675 SOUTHBOUND OVER 5TH STREET	OVERLAY - EPOXY			CON			
SAGINAW	I-675 NB	I-675 NORTHBOUND OVER WARREN AVENUE	OVERLAY - EPOXY			CON			
SAGINAW	I-675 SB	I-675 SOUTHBOUND OVER WARREN AVENUE	OVERLAY - EPOXY			CON			
SAGINAW	I-675 NB	I-675 NORTHBOUND OVER MICHIGAN AVENUE	OVERLAY - EPOXY			CON			
SAGINAW	I-675 SB	I-675 SOUTHBOUND OVER MICHIGAN AVENUE	OVERLAY - EPOXY			CON			
SAGINAW	I-675 NB	I-675 NORTHBOUND OVER WEISS STREET	OVERLAY - EPOXY			CON			
SAGINAW	I-675 SB	I-675 SOUTHBOUND OVER WEISS STREET	OVERLAY - EPOXY			CON			
SAGINAW	I-675 NB	I-675 NORTHBOUND OVER SCHAEFER STREET	OVERLAY - EPOXY			CON			
SAGINAW	I-675 SB	I-675 SOUTHBOUND OVER SCHAEFER STREET	OVERLAY - EPOXY			CON			
SAGINAW	I-675 NB	I-675 NORTHBOUND OVER SHATTUCK ROAD	OVERLAY - EPOXY			CON			
SAGINAW	I-675 SB	I-675 SOUTHBOUND OVER SHATTUCK ROAD	OVERLAY - EPOXY			CON			
SAGINAW	I-675	TITTABAWASSEE ROAD OVER I-675	OVERLAY - EPOXY			CON			
SAGINAW	I-675	MICHIGAN ROAD OVER I-675	OVERLAY - EPOXY			CON			
SAGINAW	I-675 SB	I-675 SOUTHBOUND OVER KOCHVILLE ROAD	OVERLAY - EPOXY			CON			
SAGINAW	I-675 NB	I-675 NORTHBOUND OVER I-75	OVERLAY - EPOXY			CON			
SAGINAW	I-675	MCCARTY ROAD OVER I-675	OVERLAY - EPOXY			CON			
SAGINAW	I-675 NB	I-675 NORTHBOUND OVER KOCHVILLE ROAD	OVERLAY - EPOXY			CON			
SAGINAW	I-675	I-675 SOUTH RAMP TO I-75 OVER I-675 AND I-75	OVERLAY - EPOXY			CON			

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2020-2024 FIVE-YEAR TRANSPORTATION PROGRAM

BAY REGION

BRIDGE - PRESERVATION

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2020	2021	2022	2023	2024
SAGINAW	I-675	I-675 SOUTH RAMP TO I-75 OVER I-75	OVERLAY - EPOXY			CON			
SAGINAW	I-675	JANES ROAD OVER I-675 RAMP	OVERLAY - EPOXY			CON			
SAGINAW	I-675	14TH STREET OVER I-675	OVERLAY - EPOXY			CON			
SAGINAW	I-675	JANES ROAD OVER I-75	OVERLAY - EPOXY			CON			
SANILAC	M-25	M-25 OVER FORESTER CREEK	SUPERSTRUCTURE REPAIR - CONCRETE					CON	
SHIAWASSEE	I-69 EB	I-69 EASTBOUND OVER LOOKING GLASS RIVER	SCOUR PROTECTION			CON			
SHIAWASSEE	I-69 WB	I-69 WESTBOUND OVER LOOKING GLASS RIVER	SCOUR PROTECTION			CON			
SHIAWASSEE	I-69 EB	I-69 EASTBOUND OVER WEBB DRAIN	SCOUR PROTECTION			CON			
SHIAWASSEE	I-69 WB	I-69 WESTBOUND OVER WEBB DRAIN	SCOUR PROTECTION			CON			
ST. CLAIR	M-136	M-136 OVER BLACK RIVER	OVERLAY - SHALLOW			CON			
ST. CLAIR	M-29	M-29 OVER SWAN CREEK	JOINT REPLACEMENT					CON	

BAY REGION

BRIDGE REPLACEMENT

ARENAC	I-75 SB	LINCOLN ROAD OVER I-75 SOUTHBOUND	DECK REPLACEMENT				CON		
ARENAC	I-75 NB	LINCOLN ROAD OVER I-75 NORTHBOUND	DECK REPLACEMENT				CON		
ARENAC	US-23	MELITA ROAD OVER US-23	BRIDGE REMOVAL				CON		
ARENAC	US-23 EB	US-23 EASTBOUND CONNECTOR OVER M-13	BRIDGE REMOVAL				CON		
BAY	I-75 SB	I-75 SOUTHBOUND OVER NORTH BRANCH OF KAWKAWLIN RIVER	DECK REPLACEMENT			CON			
BAY	I-75 NB	I-75 NORTHBOUND OVER NORTH BRANCH OF KAWKAWLIN RIVER	DECK REPLACEMENT			CON			
BAY	I-75	PARISH ROAD OVER I-75	DECK REPLACEMENT			CON			
BAY	I-75 SB	I-75 SOUTHBOUND OVER BEAVER ROAD	DECK REPLACEMENT			CON			
BAY	I-75 NB	I-75 NORTHBOUND OVER BEAVER ROAD	DECK REPLACEMENT			CON			
BAY	US-10	MACKINAW ROAD OVER US-10	BRIDGE REPLACEMENT					CON	
GENESEE	I-475	GTW RAILROAD AND SERVICE ROAD OVER I-475	BRIDGE REMOVAL					CON	
GENESEE	I-475	14TH STREET OVER I-475	BRIDGE REMOVAL					CON	
GENESEE	I-475	I-69 EASTBOUND OVER I-475 AND I-475 RAMPS	DECK REPLACEMENT				CON		
GENESEE	I-475	I-69 WESTBOUND OVER I-475 AND I-475 RAMPS	DECK REPLACEMENT				CON		
GENESEE	I-475	I-475 OVER THREAD CREEK	DECK REPLACEMENT					CON	
GENESEE	I-475 SB	I-475 SOUTHBOUND OVER I-75 NORTHBOUND	DECK REPLACEMENT					CON	
GENESEE	I-475	HEMPHILL ROAD OVER I-475	DECK REPLACEMENT					CON	
GENESEE	I-475	LEFT TURN LANE NO1 OVER I-475	BRIDGE REMOVAL					CON	
GENESEE	I-475	LEFT TURN LANE NO2 OVER I-475	BRIDGE REMOVAL					CON	
GENESEE	M-15 (State Road)	M-15 OVER PADDISON COUNTY DRAIN	CULVERT REPLACEMENT					CON	
GENESEE	M-21	M-21 OVER CSX RAILROAD (ABANDONED)	CULVERT REPLACEMENT			CON			
GENESEE	M-54 (South Dort Highway)	M-54 OVER GILKEY CREEK	CULVERT REPLACEMENT						CON
GRATIOT	US-127 SB	US-127 SOUTHBOUND OVER MAPLE RIVER	SUPERSTRUCTURE REPLACEMENT			CON			
ISABELLA	US-127 SB	US-127 BUSINESS ROUTE NORTHBOUND OVER US-127 SOUTHBOUND	DECK REPLACEMENT		CON				
LAPEER	M-53	M-53 OVER ELK LAKE CREEK	BRIDGE REPLACEMENT					CON	
SAGINAW	M-52	M-52 OVER MARSH CREEK	SUPERSTRUCTURE REPLACEMENT			CON			
SANILAC	M-46 (Sanilac Road)	M-46 OVER BLACK RIVER	BRIDGE REPLACEMENT					CON	
SANILAC	M-90	M-90 OVER BLACK RIVER	BRIDGE REPLACEMENT			CON			
SHIAWASSEE	M-46 (Sanilac Road)	M-46 OVER WHITE CREEK #2	CULVERT REPLACEMENT				CON		
TUSCOLA	M-46 (Sanilac Rd)	M-46 OVER WHITE CREEK #2	CULVERT REPLACEMENT						CON

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2020-2024 FIVE-YEAR TRANSPORTATION PROGRAM

BAY REGION

REPAIR AND REBUILD ROADS

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2020	2021	2022	2023	2024
ARENAC	US-23	I-75 TO M-13	ROAD REHABILITATION	3.055			CON		
ARENAC	US-23 (North Huron Road)	POINT LOOKOUT ROAD TO ARENAC/IOSCO COUNTY LINE	ROAD REHABILITATION	7.541				CON	
BAY	I-75	BEAVER RD TO COTTAGE GROVE	ROAD REHABILITATION	3.600		CON			
BAY	US-10	7 MILE ROAD TO BAY CITY	RECONSTRUCTION	5.485				CON	
CLARE	US-127 BR (North 1st Street)	COUNTY FARM ROAD TO TOWNLINE LAKE ROAD	ROAD REHABILITATION	1.342		CON			
GENESEE	I-69	FENTON ROAD TO M-54	RECONSTRUCTION	5.256			CON		
GENESEE	M-15 (State Road)	RICHFIELD ROAD TO SOUTH OF DODGE ROAD	ROAD REHABILITATION	5.927				CON	
GENESEE	M-54 (Dort Highway)	COLDWATER ROAD TO MOUNT MORRIS ROAD	ROAD REHABILITATION	2.027	CON				
GENESEE	M-57 (Vienna Road)	M-54 TO M-15	ROAD REHABILITATION	9.843		CON			
GLADWIN	M-18	FIRST STREET TO GLADWIN/ROSCOMMON COUNTY LINE	ROAD REHABILITATION	17.705		CON			
GRATIOT	US-127	GREAT LAKES CENTRAL RAILROAD CROSSING TO BAGLEY ROAD	ROAD REHABILITATION	5.994			CON		
HURON	M-142 (Sand Beach Road)	JOHNSTON ROAD TO RUTH ROAD	ROAD REHABILITATION	3.092			CON		
HURON	M-142 (Sand Beach Road)	M-53 TO M-19	ROAD REHABILITATION	2.843				CON	
HURON	M-25 (Port Austin Road)	M-142 TO CASEVILLE	ROAD REHABILITATION	9.038		CON			
ISABELLA	M-20 (East Pickard Street)	US-127 BUSINESS ROUTE (MISSION STREET) TO US-127	RECONSTRUCTION	1.621				CON	
ISABELLA	US-127	US-127 BUSINESS ROUTE TO RIVER ROAD	ROAD REHABILITATION	7.867	CON				
LAPEER	I-69 (Five Lakes Rest Area)	FIVE LAKES REST AREA	ROADSIDE FACILITIES - IMPROVE	0.957	CON				
LAPEER	I-69	M-24 TO LAKE GEORGE ROAD	RECONSTRUCTION	6.786					CON
LAPEER	M-53 (Van Dyke Road)	DEANVILLE ROAD TO MARLETTE SOUTH CITY LIMIT	ROAD REHABILITATION	9.226		CON			
LAPEER	M-53 (VanDyke Road)	BOWERS ROAD TO DEANVILLE ROAD	ROAD REHABILITATION	8.184				CON	
MIDLAND	M-20 (East Isabella Road)	M-30 TO EAST OF CURRIE PARKWAY	ROAD REHABILITATION	5.562					CON
MIDLAND	M-30 (North Meridian Road)	US-10 TO WIXOM LAKE	ROAD REHABILITATION	9.659	CON				
SAGINAW	I-675	I-75/SOUTH INTERCHANGE NORTH TO THE I-75/I-675 INTERCHANGE	ROAD REHABILITATION	8.741		CON			
SAGINAW	M-46 (Holland Road)	TOWERLINE ROAD TO RICHVILLE	ROAD REHABILITATION	10.421			CON		
SAGINAW	M-58 E (State Street)	EASTBOUND M-58, AVALON STREET TO M-84	RECONSTRUCTION	1.174					CON
SANILAC	M-46 (Sanilac Road)	M-46 AND M-19	RECONSTRUCTION	8.362					CON
SANILAC	M-90 (Burns Line Road)	M-53 TO M-19	ROAD REHABILITATION	13.788	CON				
SHIAWASSEE	M-21	CORUNNA TO M-13	ROAD REHABILITATION	9.050			CON		
ST. CLAIR	I-69	COX DOTY DRAIN TO M-19	RECONSTRUCTION	5.240		CON			
ST. CLAIR	I-69	M-19 TO TAYLOR ROAD	ROAD REHABILITATION	10.419				CON	
TUSCOLA	M-15 (State Road)	M-57 TO VASSAR	ROAD REHABILITATION	12.156	CON				
TUSCOLA	M-46 (Sanilac Road)	M-15 TO VASSAR ROAD	ROAD REHABILITATION	4.631	CON				
				216.592					

BAY REGION

CAPACITY IMPROVEMENT

ST. CLAIR	MCMORRAN BOULEVARD	COUNTYWIDE	PLANNING		EPE				
ST. CLAIR	HARKER STREET	CITY OF PORT HURON	LANDSCAPING		CON				
				0.000					

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**GRAND REGION****BRIDGE - BIG BRIDGE PROGRAM**

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2020	2021	2022	2023	2024
OTTAWA	US-31	US-31 OVER GRAND RIVER AND M-104	SUPERSTRUCTURE REPAIR - STEEL			CON			

GRAND REGION**BRIDGE - PRESERVATION**

ALLEGAN	I-196	I-196 WESTBOUND OVER US-31 NORTHBOUND	OVERLAY - DEEP			CON			
ALLEGAN	I-196 E (Lincoln Road)	M-40 OVER I-196	OVERLAY - DEEP				CON		
ALLEGAN	I-196 EB	I-196 EASTBOUND AND US-31 NORTHBOUND OVER KALAMAZOO RIVER	OVERLAY - DEEP				CON		
ALLEGAN	I-196 WB	I-196 WESTBOUND AND US-31 SOUTHBOUND OVER KALAMAZOO RIVER	OVERLAY - DEEP				CON		
ALLEGAN	I-196	107 TH AVENUE OVER I-196 AND US-31	DECK PATCHING					CON	
ALLEGAN	I-196 WB	I-196 WESTBOUND OVER CSX RAILROAD	OVERLAY - DEEP			CON			
ALLEGAN	US-31 NB	US-31 BUSINESS ROUTE (58TH) OVER US-31 NORTHBOUND	OVERLAY - DEEP					CON	
ALLEGAN	US-31	109 TH AVENUE OVER I-196 AND US-31	OVERLAY - DEEP					CON	
ALLEGAN	US-31	OLD US-31 OVER I-196 AND US-31	OVERLAY - DEEP					CON	
ALLEGAN	US-31	OLD US-31 OVER I-196 and US-31	OVERLAY - DEEP					CON	
IONIA	I-96	JORDAN LAKE ROAD OVER I-96	OVERLAY - SHALLOW				CON		
KENT	I-196 (Gerald R Ford Freeway)	I-196 EASTBOUND OVER M-45 WESTBOUND RAMP TO I-196 WESTBOUND	OVERLAY - SHALLOW		CON				
KENT	I-196 EB	I-196 EASTBOUND OVER M-45	OVERLAY - SHALLOW		CON				
KENT	I-196	I-196 RAMP M-21 BUSINESS ROUTE OVER CSX RAILROAD	OVERLAY - DEEP					CON	
KENT	I-196	RAMP B M-21 BUSINESS ROUTE I-196 OVER I-196 EASTBOUND	OVERLAY - EPOXY					CON	
KENT	I-196	I-196 RAMP A M-21 OVER M-21 BUSINESS ROUTE (CHICAGO DRIVE)	OVERLAY - EPOXY					CON	
KENT	I-296 SB	I-96 EASTBOUND CONNECTOR I-296 SOUTHBOUND OVER WEST RIVER DRIVE, CSX AND PC RAILROAD	OVERLAY - DEEP				CON		
KENT	I-96	BURTON STREET OVER I-96	OVERLAY - DEEP				CON		
KENT	I-96	FRUIT RIDGE ROAD OVER I-96	OVERLAY - DEEP					CON	
KENT	I-96	SEGWUN ROAD OVER I-96	OVERLAY - SHALLOW						CON
KENT	US-131 SB	US-131 SOUTHBOUND OVER WEST RIVER DRIVE AND MDOT RAILROAD (ABANDONED)	OVERLAY - DEEP						CON
KENT	US-131 NB	US-131 NORTHBOUND OVER WEST RIVER DRIVE AND MDOT RAILROAD (ABANDONED)	OVERLAY - DEEP						CON
KENT	US-131 SB	US-131 SOUTHBOUND OVER GRAND RIVER AND FULTON STREET	BRIDGE BARRIER RAILING REPLACE				CON		
MUSKEGON	I-96	I-96 OVER HILE ROAD	OVERLAY - DEEP				CON		
MUSKEGON	I-96 EB	I-96 EASTBOUND OVER NORRIS CREEK	OVERLAY - DEEP				CON		
MUSKEGON	I-96 WB	I-96 WESTBOUND OVER NORRIS CREEK	OVERLAY - DEEP				CON		
MUSKEGON	US-31 NB	US-31 NORTHBOUND OVER RILEY THOMPSON ROAD	OVERLAY - DEEP					CON	
MUSKEGON	US-31 SB	US-31 SOUTHBOUND OVER WHITE RIVER	OVERLAY - DEEP		CON				
MUSKEGON	US-31 NB	US-31 NORTHBOUND OVER WHITE RIVER	OVERLAY - DEEP		CON				

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2020-2024 FIVE-YEAR TRANSPORTATION PROGRAM

GRAND REGION

BRIDGE - PRESERVATION

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2020	2021	2022	2023	2024
OSCEOLA	M-66	M-66 OVER MUSKEGON RIVER	SUBSTRUCTURE REPAIR						CON
OTTAWA	I-196 EB	I-196 EASTBOUND OVER 32ND AVENUE	OVERLAY - EPOXY		CON				
OTTAWA	M-104	M-104 OVER SPRING LAKE CHANNEL	OVERLAY - DEEP				CON		
OTTAWA	US-31 NB	US-31 NORTHBOUND OVER SOUTH CHANNEL GRAND RIVER	OVERLAY - EPOXY			CON			
OTTAWA	US-31 SB	US-31 SOUTHBOUND OVER SOUTH CHANNEL GRAND RIVER	OVERLAY - DEEP			CON			
OTTAWA	US-31	US-31 OVER GTW RAILROAD AND M-104	OVERLAY - DEEP			CON			
OTTAWA	US-31	US-31 OVER 3RD STREET (M-104)	MISCELLANEOUS REHABILITATION			CON			

GRAND REGION

BRIDGE REPLACEMENT

ALLEGAN	I-196 WB/US-31 SB	I-196 WESTBOUND AND US-31 SOUTHBOUND OVER KUIPERS DRAIN	CULVERT REPLACEMENT			CON			
BARRY	M-43	M-43 OVER COLDWATER RIVER	BRIDGE REPLACEMENT						CON
KENT	I-196	I-196 EASTBOUND, M-21 OVER GRAND RIVER	DECK REPLACEMENT			CON			
MECOSTA	US-131 BR	US-131 BUSINESS ROUTE OVER DALZIEL CREEK	CULVERT REPLACEMENT				CON		
MUSKEGON	US-31 BR SB	US-31 BUSINESS ROUTE SOUTHBOUND OVER BLACK CREEK	BRIDGE REPLACEMENT					CON	
MUSKEGON	US-31 BR NB	US-31 BUSINESS ROUTE NORTHBOUND OVER BLACK CREEK	BRIDGE REPLACEMENT					CON	
OCEANA	US-31 BR (Polk Road)	US-31 BUSINESS ROUTE OVER RUSSELL CREEK	CULVERT REPLACEMENT		CON				

GRAND REGION

REPAIR AND REBUILD ROADS

ALLEGAN	I-196 WB	130TH AVENUE NORTH TO US-31	RECONSTRUCTION	7.375		CON			
ALLEGAN	I-196 WB	US-31 EAST TO CSX RAILROAD	ROAD REHABILITATION	4.170		CON			
ALLEGAN	M-179 (129th Avenue)	US-131 EAST TO GRAND ELKS RAILROAD	ROAD REHABILITATION	0.460	CON				
ALLEGAN	M-40	32ND STREET NORTH TO M-89	ROAD REHABILITATION	3.896	CON				
ALLEGAN	M-89 (Main Street)	58TH STREET EAST TO 56TH STREET (FENNIVILLE)	ROAD REHABILITATION	1.165	CON				
ALLEGAN	M-89 (Marshall Street)	M-222 EAST TO 29TH STREET	ROAD REHABILITATION	1.826			CON		
ALLEGAN	US-31	I-196 NORTH TO CENTRAL AVENUE	ROAD REHABILITATION	3.283			CON		
ALLEGAN	US-31	CENTRAL AVENUE NORTH TO ALLEGAN/OTTAWA COUNTY LINE	ROAD REHABILITATION	1.238			CON		
BARRY	M-179	ALLEGAN/BARRY COUNTY LINE EAST TO M-43	ROAD REHABILITATION	10.806		CON			
BARRY	M-66	BRUMM ROAD NORTH TO THORNAPPLE LAKE ROAD	ROAD REHABILITATION	1.027				CON	
BARRY	M-79 (Scott Road)	BARRYVILLE ROAD EAST TO NASHVILLE WEST VILLAGE LIMIT	ROAD REHABILITATION	3.330		CON			
IONIA	I-96	BLISS ROAD EAST TO SUNFIELD HIGHWAY	TRAFFIC SAFETY	9.260		CON			
IONIA	I-96 EB	BLISS ROAD EAST TO SUNFIELD HIGHWAY	RECONSTRUCTION	9.071					CON
IONIA	I-96 WB	BLISS ROAD EAST TO SUNFIELD HIGHWAY	RECONSTRUCTION	9.061			CON		
IONIA	M-21 (Lincoln Avenue)	WALL STREET EAST TO M-66 (EAST JUNCTION)	ROAD REHABILITATION	1.047		CON			
KENT	I-196	THE GRAND RIVER EAST TO LANE AVENUE	ROAD REHABILITATION	2.501	CON				
KENT	I-96	THORNAPPLE RIVER DRIVE EAST TO WEST OF WHITNEYVILL	ROAD REHABILITATION	7.649		CON			
KENT	I-96	CASCADE ROAD EAST TO M-11	ROAD REHABILITATION	3.025				CON	
KENT	M-11	CHURCH STREET EAST TO US-131	ROAD REHABILITATION	4.203			CON		
KENT	M-6 (Paul B Henry Freeway)	EAST BRANCH RUSH CREEK EAST TO BURLINGAME AVENUE	ROAD REHABILITATION	2.831					CON
KENT	M-6	KALAMAZOO AVENUE TO EAST PARIS AVENUE	ROAD REHABILITATION	3.480		CON			
MASON	US-31	OCEANA/MASON COUNTY LINE NORTH TO MEISENHEIMER ROAD	ROAD REHABILITATION	4.560		CON			
MASON	US-31	HOAGUE ROAD NORTH TO MASON/MANISTEE COUNTY LINE	ROAD REHABILITATION	2.187		CON			
MASON	US-31	SUGAR GROVE ROAD NORTH TO HOAGUE ROAD	ROAD REHABILITATION	10.103					CON
MECOSTA	US-131 NB	13 MILE ROAD NORTH TO 19 MILE ROAD	ROAD REHABILITATION	7.070			CON		
MONTCALM	M-91	KENDAVILLE ROAD NORTH TO M-46	ROAD REHABILITATION	4.489					CON

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GRAND REGION

REPAIR AND REBUILD ROADS

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2020	2021	2022	2023	2024
ALLEGAN	I-196 WB	130TH AVENUE NORTH TO US-31	RECONSTRUCTION	7.375		CON			
NEWAYGO	M-37 (State Road)	M-82 (SOUTH JUNCTION) NORTH TO THE MUSKEGON RIVER	ROAD REHABILITATION	2.142		CON			
OCEANA	ROTHBURY REST AREA	AT THE ROTHBURY REST AREA #529	ROADSIDE FACILITIES - IMPROVE	0.938		CON			
OSCEOLA	M-115	80TH AVENUE SOUTHEAST TO THE MIDDLE BRANCH RIVER	RECONSTRUCTION	1.085	CON				
OSCEOLA	M-115	50TH AVENUE SOUTHEAST TO 16 MILE ROAD	ROAD REHABILITATION	1.270	CON				
OSCEOLA	M-66	21 MILE ROAD TO MIDDLE BRANCH CREEK	ROAD REHABILITATION	3.623		CON			
OSCEOLA	US-131 SB	US-10 NORTH TO 14 MILE ROAD	ROAD REHABILITATION	7.714				CON	
OTTAWA	I-196	WEST OF 32ND AVENUE EAST TO EAST OF THE OTTAWA/ KEN	RECONSTRUCTION	5.303	CON				
OTTAWA	I-196	BYRON ROAD EAST TO 32ND AVENUE	RECONSTRUCTION	6.674				CON	
OTTAWA	I-196	BYRON ROAD EAST TO 32ND AVENUE	TRAFFIC SAFETY	6.874			CON		
				154.736					

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METRO REGION



METRO REGION

BRIDGE - BIG BRIDGE PROGRAM

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2020	2021	2022	2023	2024
WAYNE	I-75 N	I-75 OVER ROUGE RIVER, DEARBORN ST	SUBSTRUCTURE REPAIR				CON		
WAYNE	I-75 N	I-75 NB OFF RAMP OVER RAILROAD, MAINTENANCE RD	SUBSTRUCTURE PATCHING				CON		
WAYNE	I-75 N	I-75 SB ON RAMP OVER ROUGE RIVER, PLEASANT ST	SUBSTRUCTURE PATCHING				CON		
WAYNE	I-75 N	I-75 OVER FORT ST	SUBSTRUCTURE REPAIR				CON		
WAYNE	OLD 700 (Douglas MacArthur B)	BELLE ISLE TRAFFIC OVER DETROIT RIVER	SUPERSTRUCTURE REPAIR - CONCRETE				CON		

METRO REGION

BRIDGE - PRESERVATION

MACOMB	I-94	I-94 OVER CLINTON RIVER CONTROL CHANNEL	OVERLAY - EPOXY			CON			
MACOMB	I-94	I-94 RAMP(WESTBOUND BEACH OVER CLINTON RIVER SPILLWAY)	OVERLAY - EPOXY			CON			
MACOMB	I-94 WB	I-94 WESTBOUND OVER CLINTON RIVER, NORTH AND SOUTH ROADS	SCOUR PROTECTION			CON			
MACOMB	I-94 EB	I-94 EASTBOUND OVER CLINTON RIVER, NORTH AND SOUTH ROADS	SCOUR PROTECTION			CON			
MACOMB	I-94 EB	I-94 EASTBOUND OVER SELFRIDGE ANGB SPUR TRACK	HEALER SEALER			CON			
MACOMB	I-94 WB	I-94 WESTBOUND OVER SELFRIDGE ANGB SPUR TRACK	HEALER SEALER			CON			
MACOMB	I-94 EB	I-94 EASTBOUND OVER CROCKER ROAD	OVERLAY - EPOXY			CON			
MACOMB	I-94 WB	I-94 WESTBOUND OVER CROCKER ROAD	OVERLAY - EPOXY			CON			
MACOMB	I-94 EB	I-94 EASTBOUND OVER JOY ROAD	SUPERSTRUCTURE REPAIR - CONCRETE			CON			
MACOMB	I-94 WB	I-94 WESTBOUND OVER JOY ROAD	SUPERSTRUCTURE REPAIR - CONCRETE			CON			
MACOMB	I-94	21 MILE ROAD OVER I-94	OVERLAY - EPOXY			CON			
MACOMB	I-94	COTTON ROAD OVER I-94	HEALER SEALER			CON			
MACOMB	I-94 EB	I-94 EASTBOUND OVER SALT RIVER	PAINTING COMPLETE			CON			
MACOMB	I-94 WB	I-94 WESTBOUND OVER SALT RIVER	PAINTING COMPLETE			CON			
MACOMB	I-94	I-94 AND NORTHBOUND RAMP OVER FISH CREEK	SCOUR PROTECTION			CON			
MACOMB	I-94	M-19 NEW HAVEN ROAD OVER I-94	JOINT REPLACEMENT			CON			
MACOMB	I-94	26 MILE ROAD OVER I-94	PAINTING - ZONE			CON			
MACOMB	I-94	COUNTY LINE ROAD OVER I-94	OVERLAY - DEEP			CON			
MACOMB	M-53	M-53 SOUTHBOUND OVER CLINTON RIVER	OVERLAY - DEEP			CON			
MACOMB	M-53	M-53 NORTHBOUND OVER CLINTON RIVER	OVERLAY - SHALLOW			CON			
MACOMB	M-53	M-53 OVER BEAVER CREEK	SCOUR PROTECTION			CON			
OAKLAND	I-96	NOVI ROAD OVER I-96	OVERLAY - EPOXY		CON				
OAKLAND	M-10	EVERGREEN ROAD (NORTHBOUND) OVER M-10	OVERLAY - SHALLOW		CON				
OAKLAND	M-10	EVERGREEN ROAD (SOUTHBOUND) OVER M-10	OVERLAY - SHALLOW		CON				
OAKLAND	M-10	10 MILE ROAD OVER M-10	SUPERSTRUCTURE REPAIR - STEEL		CON				
OAKLAND	M-10	MOUNT VERNON STREET OVER M-10	OVERLAY - SHALLOW		CON				
OAKLAND	M-24	M-24 OVER PAINT CREEK	OVERLAY - EPOXY		CON				
WAYNE	I-275 SB	I-275 SOUTHBOUND OVER CSX RAILROAD	OVERLAY - EPOXY		CON				
WAYNE	I-275 NB	I-275 NORTHBOUND OVER CSX RAILROAD	OVERLAY - EPOXY		CON				

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2020-2024 FIVE-YEAR TRANSPORTATION PROGRAM

METRO REGION

BRIDGE - PRESERVATION

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2020	2021	2022	2023	2024
WAYNE	I-275	I-275 RAMP NORTHBOUND OVER CSX RAILROAD	OVERLAY - EPOXY		CON				
WAYNE	I-275	SIX MILE ROAD OVER I-96	OVERLAY - EPOXY		CON				
WAYNE	I-275 SB	SOUTHBOUND TO EASTBOUND I-96 OVER I-275 NORTHBOUND	OVERLAY - EPOXY		CON				
WAYNE	I-275	FIVE MILE ROAD OVER I-96	OVERLAY - DEEP		CON				
WAYNE	I-275 SB	I-275 SOUTHBOUND OVER SCHOOLCRAFT ROAD	DECK REPLACEMENT		CON				
WAYNE	I-275 NB	I-275 NORTHBOUND OVER M-14	SUBSTRUCTURE REPLACEMENT		CON				
WAYNE	I-275 S	I-275 NORTHBOUND COLLECTOR OVER M-14	SUBSTRUCTURE REPLACEMENT		CON				
WAYNE	I-75	DAVISON TO I-75 RP OVER GTW RAILROAD, I-75 AND M-8 (DAVISON)	DECK PATCHING - FULL DEPTH			CON			
WAYNE	I-75	HOLBROOK AVENUE OVER I-75	DECK PATCHING - FULL DEPTH			CON			
WAYNE	I-75	SAVANNAH AVENUE OVER I-75	PAINTING COMPLETE			CON			
WAYNE	I-75	MEADE STREET OVER I-75	PAINTING COMPLETE			CON			
WAYNE	I-75 N	I-75 OVER RAMP TO DAVISON(M-8)	SUBSTRUCTURE PATCHING			CON			
WAYNE	I-75	I-75 OVER RAMP TO M-8 (DAVISON)	OVERLAY - EPOXY			CON			
WAYNE	I-75	I-75 AND RAMPS C AND D OVER M-8 (DAVISON) AND SERVICE ROADS	DECK PATCHING - FULL DEPTH			CON			
WAYNE	I-75	M-8 (DAVISON) RAMP OVER I-75	OVERLAY - EPOXY			CON			
WAYNE	I-75	DAVISON RAMP TO 75 OVER DEQUINDRE AVENUE	SUBSTRUCTURE PATCHING				CON		
WAYNE	I-94	CHENE RAMP TO I-94 OVER EASTBOUND EAST GRAND BOULVARD	DECK PATCHING - FULL DEPTH						CON
WAYNE	I-96	SOUTHBOUND TO WESTBOUND TURN ROADWAY OVER CSX RAILROAD AND FULLERTON AVENUE	OVERLAY - EPOXY						CON
WAYNE	I-96	TURN ROADWAY 3RD LEVEL OVER I-96 AND CSX RAILROAD	OVERLAY - EPOXY						CON
WAYNE	I-96	TURN ROADWAY 4TH LEVEL OVER CSX RAILROAD AND 3RD LEVEL TURN ROAD	OVERLAY - EPOXY						CON
WAYNE	I-96	TURN ROADWAY EASTBOUND TO SOUTHBOUND OVER WESTBOUND AND U-TURN SERVICE ROADS	OVERLAY - EPOXY						CON
WAYNE	I-96	TURN ROADWAY 3RD LEVEL OVER I-96 ROADWAYS	OVERLAY - EPOXY						CON
WAYNE	I-96	I-96 EASTBOUND COLLECTOR OVER M-39 SOUTHFIELD FREEWAY	OVERLAY - EPOXY						CON
WAYNE	I-96	I-96 EASTBOUND MAIN ROADWAY OVER M-39 (SOUTHFIELD EXPRESSWAY)	METAL MESH PANELS						CON
WAYNE	I-96	I-96 WESTBOUND COLLECTOR OVER M-39 (SOUTHFIELD EXPRESSWAY)	OVERLAY - EPOXY						CON
WAYNE	I-96	I-96 WESTBOUND MAIN ROADWAY OVER M-39 (SOUTHFIELD EXPRESSWAY)	PAINTING COMPLETE						CON
WAYNE	I-96	CSX RAILROAD OVER M-39	OVERLAY - EPOXY				CON		
WAYNE	I-96	SCHAEFER ROAD OVER I-96 (JEFFRIES FREEWAY)	OVERLAY - EPOXY				CON		
WAYNE	I-96	MEYERS ROAD OVER I-96 (JEFFRIES FREEWAY)	OVERLAY - EPOXY				CON		
WAYNE	I-96	WYOMING AVENUE OVER I-96 (JEFFRIES FREEWAY)	OVERLAY - EPOXY				CON		
WAYNE	I-96 WB	I-96 WESTBOUND COLLECTOR OVER RAMP TO M-8	DECK PATCHING				CON		
WAYNE	I-96	FULLERTON AVENUE OVER I-96 (JEFFRIES FREEWAY)	OVERLAY - EPOXY				CON		
WAYNE	I-96 EB	WEST GRAND BOULEVARD AND TIREMA OVER I-96	OVERLAY - EPOXY				CON		
WAYNE	I-96 WB	WEST GRAND BOULEVARD AND TIREMAN OVER I-96	SUBSTRUCTURE REPAIR				CON		
WAYNE	I-96	CSX RAILROAD OVER I-96 (JEFFRIES FREEWAY)	OVERLAY - EPOXY				CON		
WAYNE	I-96 WB	WESTBOUND TO NORTHBOUND TURN ROADWAY OVER CSX RAILROAD-FULLERTON	OVERLAY - EPOXY				CON		
WAYNE	I-96 WB	WESTBOUND TO SOUTHBOUND TURN ROADWAY OVER 3RD LEVEL TURN ROADWAY	OVERLAY - EPOXY				CON		
WAYNE	I-96	I-96 RAMP NORTHBOUND TO EASTBOUND OVER M-39 RAMP AND EAST SERVICE ROAD	OVERLAY - EPOXY				CON		
WAYNE	I-96	I-96 RAMP OVER OPEN GROUND	OVERLAY - EPOXY				CON		
WAYNE	I-96	I-96 RAMP OVER EASTBOUND SERVICE ROAD	OVERLAY - SHALLOW				CON		
WAYNE	I-96	I-96 RAMP OVER LAND	OVERLAY - EPOXY				CON		
WAYNE	I-96	I-96 RAMP OVER WESTBOUND SERVICE ROAD	OVERLAY - EPOXY		CON				
WAYNE	M-14	SCHOOLCRAFT CONNECTOR OVER M-14	SCOUR PROTECTION		CON				
WAYNE	M-14	I-275 SOUTHBOUND OVER TONQUISH CREEK	OVERLAY - EPOXY		CON				

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2020-2024 FIVE-YEAR TRANSPORTATION PROGRAM

METRO REGION

BRIDGE - PRESERVATION

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2020	2021	2022	2023	2024
WAYNE	M-14	I-275 SOUTHBOUND OVER MIDDLE ROUGE RIVER	OVERLAY - EPOXY		CON				
WAYNE	M-14	I-275 NORTHBOUND OVER MIDDLE ROUGE RIVER	SCOUR PROTECTION		CON				
WAYNE	M-14	I-275 NORTHBOUND OVER TONQUISH CREEK	OVERLAY - EPOXY		CON				
WAYNE	M-14	I-275 NORTHBOUND TO I-96 EASTBOUND OVER SCHOOLCRAFT ROAD	BRIDGE BARRIER RAILING REPAIR		CON				
WAYNE	M-14	I-275 SOUTHBOUND OVER M-14	OVERLAY - EPOXY		CON				
WAYNE	M-14 WB	SOUTHBOUND TO EASTBOUND I-96 OVER M-14 WESTBOUND	SUPERSTRUCTURE REPAIR - STEEL		CON				
WAYNE	M-14	I-275 NORTHBOUND OVER SCHOOLCRAFT ROAD	OVERLAY - EPOXY		CON				
WAYNE	M-14	I-275 NORTHBOUND COLLECTOR OVER SCHOOLCRAFT ROAD	OVERLAY - EPOXY		CON				
WAYNE	M-153 E	M-153 WB OVER ROUGE RIVER	PIN & HANGER REPLACEMENT			CON			
WAYNE	M-153	MILLER ROAD OVER M-153	OVERLAY - EPOXY		CON				
WAYNE	M-153 WB	M-153 WESTBOUND OVER ROUGE RIVER	PIN & HANGER REPLACEMENT			CON			
WAYNE	M-153 EB	M-153 EASTBOUND OVER ROUGE RIVER	OVERLAY - SHALLOW			CON			
WAYNE	M-153 EB	M-153 EASTBOUND OVER HINES DRIVE	SUPERSTRUCTURE REPAIR - STEEL			CON			
WAYNE	M-39	M-39 OVER ROUGE RIVER	SUPERSTRUCTURE REPAIR - STEEL		CON				
WAYNE	M-39 NB	M-39 NORTHBOUND SERVICE ROAD OVER ROUGE RIVER	SUBSTRUCTURE REPAIR		CON				
WAYNE	M-39 SB	M-39 SOUTHBOUND SERVICE ROAD OVER ROUGE RIVER	BRIDGE BARRIER RAILING REPLACE		CON				
WAYNE	M-39	U-TURN SERVICE ROAD OVER M-39 (SOUTHFIELD EXPRESSWAY)	OVERLAY - EPOXY						CON
WAYNE	OLD 709	CENTRAL AVENUE OVER CANOE STREAM	ASPHALT CAP (NO MEMBRANE)				CON		
WAYNE	OLD 709	OAKWAY TRAIL OVER CANOE STREAM	SCOUR PROTECTION				CON		

METRO REGION

BRIDGE REPLACEMENT

OAKLAND	I-696	I-696 OVER PEBBLE CREEK	CULVERT REPLACEMENT					CON	
WAYNE	I-75	M-102 8 MILE ROAD OVER I-75	DECK REPLACEMENT					CON	
WAYNE	I-94 WB	I-94 WESTBOUND OVER ECORSE ROAD	BRIDGE REPLACEMENT				CON		
WAYNE	I-94	I-94 OVER ENT TO FORD PLANT	SUPERSTRUCTURE REPLACEMENT					CON	
WAYNE	I-96	HUBBELL AVENUE OVER I-96 (JEFFRIES FREEWAY)	DECK REPLACEMENT				CON		
WAYNE	I-96	FULLERTON AVENUE OVER I-96 (JEFFRIES FREEWAY)	DECK REPLACEMENT				CON		
WAYNE	M-153 WB	M-153 WESTBOUND OVER HINES DRIVE	DECK REPLACEMENT			CON			
WAYNE	OLD-705	VISTA AVENUE OVER CANOE STREAM	BRIDGE REPLACEMENT				CON		
WAYNE	US-24 SB	US-24 SOUTHBOUND OVER FRANK AND POET DRAIN	SCOUR PROTECTION					CON	
WAYNE	US-24 NB	US-24 NORTHBOUND OVER FRANK AND POET DRAIN	CULVERT REPLACEMENT					CON	

METRO REGION

REPAIR AND REBUILD ROADS

MACOMB	M-3	11 MILE ROAD TO 14 MILE ROAD	RECONSTRUCTION	6.880		CON			
OAKLAND	I-696	LAHSER ROAD TO DEQUINDRE ROAD	ROAD REHABILITATION	9.897					CON
OAKLAND	I-696	I-275 TO LAHSER	ROAD REHABILITATION	8.536				CON	
OAKLAND	M-150	AVON TO CLINTON RIVER AND PAINT CREEK TO TIENKEN	ROAD REHABILITATION	1.464					CON
OAKLAND	M-24	SOUTH OF GOLDENGATE TO NORTH OF HARRIET	ROAD REHABILITATION	4.580	CON				
OAKLAND	US-24	LONG LAKE TO ORCHARD LAKE ROAD AND MAPLE ROAD INTERSECTION	ROAD REHABILITATION	4.170				CON	
WAYNE	I-275	SOUTH OF M-153 TO 5 MILE ROAD	ROAD REHABILITATION	6.404	CON				
WAYNE	I-275	NORTHLINE ROAD (SOUTH OF I-94) TO M-153	ROAD REHABILITATION	8.652		CON			
WAYNE	I-375 BS	SOUTH OF I-75/I-375 INTERCHANGE TO JEFFERSON AVENUE	RECONSTRUCTION	3.362			CON		
WAYNE	I-375 BS	M-3 (GRATIOT AVENUE) OVER DEQUINDRE CUT	BRIDGE REPLACEMENT				CON		
WAYNE	I-375 BS	LARNED STREET OVER I-375	BRIDGE REMOVAL				CON		
WAYNE	I-375 BS	JEFFERSON AVENUE OVER I-375	BRIDGE REMOVAL				CON		
WAYNE	I-375 BS	HASTINGS STREET OVER I-375	BRIDGE REMOVAL				CON		
WAYNE	I-94	PELHAM TO EAST OF M-39	ROAD REHABILITATION	3.489				CON	
WAYNE	M-153 (Ford Road)	WEST OF SHELTON ROAD TO WEST OF LOTZ ROAD	RECONSTRUCTION	2.412			CON		

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2020-2024 FIVE-YEAR TRANSPORTATION PROGRAM

METRO REGION

REPAIR AND REBUILD ROADS

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2020	2021	2022	2023	2024
WAYNE	M-153	WEST COUNTY LINE TO EAST OF CANTON CENTER ROAD	ROAD REHABILITATION	3.188		CON			
WAYNE	M-39	MCNICHOLS ROAD TO PLYMOUTH ROAD	RECONSTRUCTION	3.075					CON
WAYNE	US-12 (Michigan Avenue)	LOTZ ROAD TO PERSHING STREET	ROAD REHABILITATION	2.048				CON	
WAYNE	US-12	HENRY RUFF TO GULLEY	ROAD REHABILITATION	2.833					CON
WAYNE	US-24 (Telegraph Road)	CARTER TO PENNSYLVANIA	ROAD REHABILITATION	2.633				CON	
WAYNE	US-24	GRAND RIVER TO NORTH OF 8 MILE ROAD	RECONSTRUCTION	1.431		CON			
				75.054					

METRO REGION

NEW ROADS - GORDIE HOWE INTERNATIONAL BRIDGE

WAYNE	GORDIE HOWE INTERNATIONAL	BRIDGE AREA	NEW ROAD		CON	CON	CON	CON	
WAYNE	GORDIE HOWE INTERNATIONAL	BRIDGE AREA	NEW ROAD		ROW	ROW			
WAYNE	GORDIE HOWE INTERNATIONAL	BRIDGE AREA	NEW ROAD		PE	PE			
WAYNE	GORDIE HOWE INTERNATIONAL	INTERCHANGE AREA	NEW ROAD		CON	CON	CON	CON	
WAYNE	GORDIE HOWE INTERNATIONAL	INTERCHANGE AREA	NEW ROAD		ROW	ROW			
WAYNE	GORDIE HOWE INTERNATIONAL	INTERCHANGE AREA	NEW ROAD		PE	PE			
WAYNE	GORDIE HOWE INTERNATIONAL	PLAZA AREA	NEW ROAD		CON	CON	CON	CON	
WAYNE	GORDIE HOWE INTERNATIONAL	AT THE GORDIE HOWE INTERNATIONAL BRIDGE	PROJECT MANAGEMENT CONTRACT		CON	CON	CON	CON	
WAYNE	GORDIE HOWE RAIL (Gordie Howe International)	WEST OF PLAZA AREA	NEW ROAD		CON	CON	CON	CON	CON
WAYNE	GORDIE HOWE RAIL (Gordie Howe International)	WEST OF PLAZA AREA	NEW ROAD		ROW	ROW	ROW	ROW	
WAYNE	GORDIE HOWE RAIL (Gordie Howe International)	WEST OF PLAZA AREA	NEW ROAD		PE	PE	PE	PE	
WAYNE	GORDIE HOWE RAIL (Gordie Howe International)	WEST OF PLAZA AREA	NEW ROAD		UTL	UTL	UTL	UTL	
				0.000					

METRO REGION

TRUNKLINE MODERNIZATION I-75 OAKLAND COUNTY

OAKLAND	I-75	FROM 8 MILE ROAD TO NORTH OF 13 MILE ROAD	RECONSTRUCTION	5.416	CON	CON	CON	CON	CON
OAKLAND	I-75	FROM NORTH OF 13 MILE ROAD TO COOLIDGE HIGHWAY	RECONSTRUCTION	8.878	CON	CON	CON	CON	CON
OAKLAND	I-75	FROM 8 MILE TO M-59, OAKLAND COUNTY	PROJECT MANAGEMENT CONTRACT		EPE	EPE	EPE		
OAKLAND	I-75	NORTH OF 13 MILE TO NORTH OF COOLIDGE HIGHWAY ON I-75	ENVIRONMENTAL MITIGATION	8.796		CON	CON	CON	CON
OAKLAND	I-75	NORTH OF 13 MILE TO NORTH OF COOLIDGE HIGHWAY ON I-75	ENVIRONMENTAL MITIGATION		PE	PE			
				23.090					

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METRO REGION

TRUNKLINE MODERNIZATION I-94 DETROIT

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2020	2021	2022	2023	2024
WAYNE	I-94	AT BURNS STREET	BRIDGE REPLACEMENT			CON	CON		
WAYNE	I-94	AT BURNS STREET	BRIDGE REPLACEMENT		PE	PE			
WAYNE	I-94	AT CONRAIL RAILROAD	BRIDGE REPLACEMENT			CON	CON		
WAYNE	I-94	AT CONRAIL RAILROAD	BRIDGE REPLACEMENT			CON	CON		
WAYNE	I-94	AT FRONTENAC STREET	BRIDGE REPLACEMENT			CON	CON		
WAYNE	I-94	AT FRONTENAC STREET	BRIDGE REPLACEMENT		PE	PE			
WAYNE	I-94	AT GRAND RIVER AVENUE	BRIDGE REPLACEMENT	0.078		CON	CON		
WAYNE	I-94	AT GRAND RIVER AVENUE	BRIDGE REPLACEMENT		PE	PE			
WAYNE	I-75	AT MILWAUKEE AVENUE	BRIDGE REPLACEMENT		CON	CON			
WAYNE	I-75	AT MILWAUKEE AVENUE	BRIDGE REPLACEMENT		PE				
WAYNE	I-94 (Ford Freeway)	BRUSH STREET OVER I-94	BRIDGE REPLACEMENT		CON	CON			
WAYNE	I-94 (Ford Freeway)	CADILLAC AVENUE, DETROIT	BRIDGE REPLACEMENT		CON	CON	CON		
WAYNE	I-94 (Ford Freeway)	CADILLAC AVENUE, DETROIT	BRIDGE REPLACEMENT		PE	PE			
WAYNE	I-94 (Ford Freeway)	CADILLAC AVE OVER I-94	BRIDGE REPLACEMENT		PE-B	PE-B			
WAYNE	I-94 (Ford Freeway)	CASS AVENUE, DETROIT	BRIDGE REPLACEMENT		CON	CON	CON		
WAYNE	I-94 (Ford Freeway)	CASS AVENUE, DETROIT	BRIDGE REPLACEMENT		PE	PE			
WAYNE	I-94 (Ford Freeway)	CASS AVE OVER I-94	BRIDGE REPLACEMENT		PE-B	PE-B			
WAYNE	I-94	CHENE AND GRATIOT BRIDGES OVER I-94	MISCELLANEOUS BRIDGE	0.077	CON	CON			
WAYNE	I-94	CHENE AND GRATIOT OVER I-94	MISCELLANEOUS BRIDGE		CON	CON			
WAYNE	I-94	CHENE AND GRATIOT OVER I-94	MISCELLANEOUS BRIDGE		CON	CON			
WAYNE	I-94 (Ford Freeway)	CONCORD AVENUE OVER I-94	BRIDGE REPLACEMENT		CON				
WAYNE	I-94	EAST OF I-96 TO E OF CONNER AVENUE	RECONSTRUCTION		ROW	ROW	ROW	ROW	ROW
WAYNE	I-94	EAST OF I-96 TO E OF CONNER AVENUE	RECONSTRUCTION		PE	PE			
WAYNE	I-94	E. GRAND BLVD OVER I-94	BRIDGE REPLACEMENT		CON	CON			
WAYNE	I-94	E. GRAND BLVD OVER I-94	BRIDGE REPLACEMENT		PE				
WAYNE	I-94 (Ford Freeway)	FRENCH RD OVER I-94	BRIDGE REPLACEMENT		CON				
WAYNE	I-94 W	FROM I-96 TO CONNER	DYNAMIC LANE USE	6.856	CON	CON	CON	CON	
WAYNE	I-94	FROM I-96 TO CONNER	DYNAMIC LANE USE		PE				
WAYNE	I-94	FROM I-96 TO CONNER	QUEUE WARNING SYSTEM	6.845	CON				
WAYNE	I-94	FROM I-96 TO CONNER	QUEUE WARNING SYSTEM		PE				
WAYNE	I-94	FROM SAINT AUBIN TO FRONTENAC	RECONSTRUCTION	1.502				CON	CON
WAYNE	I-94	FROM SAINT AUBIN TO FRONTENAC	RECONSTRUCTION		PE	PE	PE	PE	
WAYNE	I-94	GRATIOT (M-3) BRIDGE OVER I-94	LANDSCAPING	0.265	CON	CON	CON		
WAYNE	I-94 (Ford Freeway)	MOUNT ELLIOT STREET OVER I-94	BRIDGE REPLACEMENT		CON	CON			
WAYNE	I-94 (Ford Freeway)	MOUNT ELLIOT STREET OVER I-94	BRIDGE REPLACEMENT		PE				
WAYNE	I-94 (Ford Freeway)	MOUNT ELLIOT STREET OVER I-94	BRIDGE REPLACEMENT		PE-B				
WAYNE	I-94	MOUNT ELLIOT STREET OVER I-94	MISCELLANEOUS BRIDGE		CON				
WAYNE	I-94	MOUNT ELLIOT STREET OVER I-94	MISCELLANEOUS BRIDGE		CON				
WAYNE	I-94	SECOND AND BRUSH OVER I-94	LANDSCAPING - IMPROVE	0.153	CON	CON	CON	CON	
WAYNE	I-94	SECOND AND BRUSH OVER I-94	MISCELLANEOUS ROADSIDE	0.172	CON	CON	CON	CON	
WAYNE	I-94	SECOND AVENUE OVER I-94	MISCELLANEOUS BRIDGE		CON				
WAYNE	I-94 (Ford Freeway)	SECOND AVENUE OVER I-94	BRIDGE REPLACEMENT		CON	CON			
WAYNE	I-94	AT THIRD STREET BRIDGE	BRIDGE REMOVAL		CON	CON	CON		
WAYNE	I-94	THIRD STREET OVER I-94	BRIDGE REMOVAL		PE-B	PE-B			
				15.948					

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**NORTH REGION****BRIDGE - BIG BRIDGE PROGRAM**

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MANISTEE	US-31	US-31 OVER MANISTEE RIVER	DECK REPLACEMENT				CON		

NORTH REGION**BRIDGE PRESERVATION**

OSCODA	M-33/M-72	M-33 M-72 OVER AU SABLE RIVER	MISCELLANEOUS BRIDGE CPM		CON				
ROSCOMMON	M-18 (E. Houghton Lake Drive)	M-18 OVER SPRING BROOK CREEK	SUPERSTRUCTURE REPAIR - CONCRETE				CON		
WEXFORD	M-115	M-115 OVER MANISTEE RIVER	OVERLAY - DEEP		CON				

NORTH REGION**BRIDGE REPLACEMENT**

EMMET	US-23 SB	US-23 SOUTHBOUND OVER I-75	SUPERSTRUCTURE REPLACEMENT				CON		
MANISTEE	M-55	M-55 OVER MANISTEE RIVER	BRIDGE REPLACEMENT		CON				
OGEMAW	M-33 (North Williams Street)	M-33 OVER HOUGHTON CREEK	CULVERT REPLACEMENT					CON	
PRESQUE ISLE	US-23	US-23 OVER TWIN LAKES OUTLET	CULVERT REPLACEMENT					CON	

NORTH REGION**REPAIR AND REBUILD ROADS**

ALCONA	US-23	WASHINGTON STREET TO LAKESHORE DRIVE	RECONSTRUCTION	1.867		CON			
BENZIE	M-22	FROM SEVENTH STREET TO DAY STREET	RECONSTRUCTION	0.551	CON				
BENZIE	US-31	M-115 SOUTH TO THE BETSIE RIVER	RECONSTRUCTION	1.416	CON				
BENZIE	US-31	FROM CRYSTAL DRIVE TO EAST OF LINCOLN ROAD	ROAD REHABILITATION	2.114			CON		
BENZIE	US-31	CRYSTAL DRIVE WEST TO R01 OF 10032	ROAD REHABILITATION	1.021		CON			
BENZIE	US-31	FROM REYNOLDS ROAD TO M-137	RECONSTRUCTION	5.167					CON
CHARLEVOIX	M-66	MONROE CREEK	RECONSTRUCTION	0.255		CON			
CHARLEVOIX	US-131	CHERRY HILL ROAD TO NORTH OF THUMB LAKE ROAD	RECONSTRUCTION	1.259	CON				
CHARLEVOIX	US-31	BARNARD ROAD/NORWOOD ROAD NORTH TO BARNARD ROAD	RECONSTRUCTION	6.883					CON
CHEBOYGAN	I-75	FROM LEVERING ROAD TO SOUTH OF HEBRON TOWN HALL ROAD	ROAD REHABILITATION	3.881		CON			
CHEBOYGAN	I-75	NORTH OF M-27 TO TOPINABEE MAIL ROUTE	ROAD REHABILITATION	2.332	CON				
CHEBOYGAN	M-27	I-75 NB RAMPS TO WOODSIDE PARK ROAD; AND POLISH LINE	ROAD REHABILITATION	4.966		CON			
CHEBOYGAN	M-27	WOODSIDE PARK DRIVE TO POLISH LINE ROAD	ROAD REHABILITATION	7.457		CON			

2020-2024 FIVE-YEAR TRANSPORTATION PROGRAM

NORTH REGION

REPAIR AND REBUILD ROADS

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2020	2021	2022	2023	2024
CHEBOYGAN	I-75	FROM SOUTH OF HEBRON TOWN HALL ROAD NORTH TO US-31	ROAD REHABILITATION	5.249			CON		
CHEBOYGAN	US-23	FROM CORDWOOD ROAD TO DUNCAN AVENUE	ROAD REHABILITATION	6.995		CON			
CHEBOYGAN	US-23	M-27 TO LITTLE BLACK RIVER AND M-27 AT LINCOLN STREET	ROAD REHABILITATION	1.148	CON				
CRAWFORD	I-75	M-93 TO CRAWFORD NORTH COUNTY LINE	ROAD REHABILITATION	9.876					CON
EMMET	I-75	FROM OLD M-108 NORTH TO MACKINAC BRIDGE	ROAD REHABILITATION	2.289			CON		
EMMET	US-31	M-119 TO MANVEL ROAD; AND M-119, FROM US-31 TO PICKEREL LAKE ROAD	ROAD REHABILITATION	0.240	CON				
EMMET	US-31	BLUMKE ROAD NORTH TO MILTON ROAD	RECONSTRUCTION	4.117			CON		
GRAND TRAVERSE	M-37	VANCE ROAD TO BLAIR TOWNHALL ROAD.	ROAD REHABILITATION	1.095		CON			
GRAND TRAVERSE	M-37	BLAIR TOWNHALL ROAD TO M-113	ROAD REHABILITATION	4.024		CON			
GRAND TRAVERSE	M-72	US-31 (DIVISION STREET) NORTH TO M-72	RECONSTRUCTION	0.971					CON
GRAND TRAVERSE	US-31	FROM EAST SILVER LAKE ROAD TO M-37	MINOR WIDENING	0.623	CON				
GRAND TRAVERSE	US-31	MURCHIE BRIDGE EAST TO GARFIELD AVENUE	RECONSTRUCTION	0.864			CON		
GRAND TRAVERSE	US-31	DIVISION STREET TO B01 OF 28013	RECONSTRUCTION	1.211				CON	
IOSCO	M-55	M-55 FROM IOSCO WEST COUNTY LINE TO CHAMBERS ROAD AND M-65	ROAD REHABILITATION	25.058		CON			
MANISTEE	M-22	DONTZ ROAD TO 8 MILE ROAD (ONEKAMA)	ROAD REHABILITATION	6.564	CON				
MANISTEE	US-31	M-55 NORTH TO M-22	ROAD REHABILITATION	3.224	CON				
OGEMAW	M-55	WEST OF FAIRVIEW STREET TO WEST OF M-30	RECONSTRUCTION	1.193				CON	
OTSEGO	I-75 BL	SOUTHBOUND I-75 OFF RAMP TO WISCONSIN AVENUE/ GRANDVIEW BOULEVARD	ROAD REHABILITATION	2.153					CON
ROSCOMMON	I-75	MAPLE VALLEY ROAD TO 9 MILE HILL ROAD	ROAD REHABILITATION	6.785				CON	
ROSCOMMON	M-18	M-157 NORTH TO LANSING ROAD	ROAD REHABILITATION	6.645	CON				
ROSCOMMON	M-55	US-127 NORTHBOUND TO FEDERAL AVENUE (CR 305)	ROAD REHABILITATION	3.566		CON			
WEXFORD	OLD 55	FROM M-115 TO LANSING STREET	RECONSTRUCTION	1.303	CON				
WEXFORD	US-131	M-115 NORTH TO MACKINAW TRAIL	ROAD REHABILITATION	0.752					CON
				135.114					

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**SOUTHWEST REGION****BRIDGE - PRESERVATION**

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2020	2021	2022	2023	2024
BERRIEN	I-94 EB	I-94 EB OVER HENNESSY ROAD	OVERLAY - EPOXY					CON	
BERRIEN	I-94 WB	I-94 WB OVER HENNESSY ROAD	OVERLAY - EPOXY					CON	
BRANCH	US-12 (West Chicago Street)	US-12 OVER COLDWATER RIVER	BRIDGE BARRIER RAILING REPLACE					CON	
CALHOUN	I-69	N DRIVE NORTH OVER I-69	OVERLAY - DEEP			CON			
CALHOUN	I-69	GARFIELD ROAD OVER I-69	OVERLAY - DEEP			CON			
CALHOUN	I-69	J DRIVE NORTH OVER I-69	OVERLAY-DEEP			CON			
CALHOUN	I-69	I-69 SB OVER I-94	PAINTING COMPLETE			CON			
CALHOUN	I-69	I-69 SB COLLECTOR OVER I-94	PAINTING COMPLETE			CON			
CALHOUN	I-69	I-69 NB OVER I-94	PAINTING COMPLETE			CON			
CALHOUN	I-69	I-69 NB COLLECTOR OVER I-94	PAINTING COMPLETE			CON			
CALHOUN	I-69	I-69 SB OVER ST JOSEPH RIVER	OVERLAY - DEEP				CON		
CALHOUN	I-69	I-69 NB OVER ST JOSEPH RIVER	OVERLAY - DEEP				CON		
CALHOUN	I-69	JACKSON ROAD OVER I-69	OVERLAY - DEEP				CON		
CALHOUN	I-94	I-94 BUSINESS LOOP (MICHIGAN AVENUE) OVER I-94	BRIDGE BARRIER RAILING REPLACE					CON	
CALHOUN	I-94 (Old US 27)	17 MILE ROAD OVER I-94	SUBSTRUCTURE REPLACEMENT						CON
CALHOUN	I-94 EB	I-94 EASTBOUND OVER RIVERSIDE DRIVE	OVERLAY - EPOXY				CON		
CALHOUN	I-94 WB	I-94 WESTBOUND OVER RIVERSIDE DRIVE	OVERLAY - EPOXY				CON		
CALHOUN	I-94	I-194 AND M-66 NORTHBOUND OVER I-94	PAINTING COMPLETE				CON		
CALHOUN	I-94	I-194 AND M-66 SOUTHBOUND OVER I-94	PAINTING COMPLETE				CON		
CALHOUN	M-89	M-89 (WASHINGTON) OVER GTW RAILROAD AND KALAMAZOO RIVER	OVERLAY - EPOXY						CON
ST. JOSEPH	M-60	M-60 AND M-66 OVER NOTTAWA CREEK	OVERLAY - EPOXY				CON		
VAN BUREN	I-94	32 ND ST (CR653) OVER I-94	OVERLAY - SHALLOW			CON			

SOUTHWEST REGION**BRIDGE - REPLACEMENT**

KALAMAZOO	US-131 NB	US-131 NORTHBOUND OVER AMTRAK AND KL AVENUE	BRIDGE REPLACEMENT					CON	
KALAMAZOO	US-131 SB	US-131 SOUTHBOUND OVER AMTRAK AND KL AVENUE	BRIDGE REPLACEMENT					CON	
ST. JOSEPH	US-131 BR	US-131 BUSINESS ROUTE OVER ST JOSEPH RIVER	DECK REPLACEMENT			CON			

SOUTHWEST REGION**REPAIR AND REBUILD ROADS**

BERRIEN	I-94	BRITAIN AVENUE TO I-196	RECONSTRUCTION	5.415	CON				
BERRIEN	I-94	HIGHLAND ROAD OVER I-94	BRIDGE REMOVAL		CON				
BERRIEN	I-94	I-94 BUSINESS LOOP EASTBOUND (MAIN) OVER I-94	BRIDGE REMOVAL		CON				
BERRIEN	I-94	TERRITORIAL ROAD OVER I-94	BRIDGE REPLACEMENT		CON				
BERRIEN	I-94	BENTON CENTER ROAD OVER I-94	OVERLAY - EPOXY		CON				

2020-2024 FIVE-YEAR TRANSPORTATION PROGRAM

SOUTHWEST REGION

REPAIR AND REBUILD ROADS

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2020	2021	2022	2023	2024
BERRIEN	I-94	NORTHBOUND US-31 AND WESTBOUND I-94 BUSINESS LOOP OVER I-94	NEW STRUCTURE ON RELOCATED ROUTE		CON				
BERRIEN	I-94	SOUTHBOUND US-31 AND EASTBOUND I-94 BUSINESS LOOP OVER I-94	NEW STRUCTURE ON RELOCATED ROUTE		CON				
BERRIEN	I-94	ST. JOSEPH RIVER TO BRITAIN AVENUE	RECONSTRUCTION	4.086			CON		
BERRIEN	I-94	I-94 OVER YORE AND STOEFFER DRAIN	CULVERT REPLACEMENT				CON		
BERRIEN	I-94 EB	I-94 EASTBOUND OVER PIPESTONE ROAD	BRIDGE REPLACEMENT				CON		
BERRIEN	I-94 WB	I-94 WESTBOUND OVER PIPESTONE ROAD	BRIDGE REPLACEMENT				CON		
BERRIEN	I-94	I-94 BUSINESS LOOP (EXIT 23) TO THE ST. JOSEPH RIVER	RECONSTRUCTION	6.352					CON
BERRIEN	I-94	I-94 OVER TRIB TO HICKORY CREEK	MISCELLANEOUS BRIDGE CSM						CON
BERRIEN	I-94 EB	I-94 EASTBOUND OVER CSX RAILROAD	OVERLAY - DEEP						CON
BERRIEN	I-94 WB	I-94 WESTBOUND OVER CSX RAILROAD	OVERLAY - DEEP						CON
BERRIEN	I-94 WB	I-94 WESTBOUND RAMP B OVER CSX RAILROAD	DECK REPLACEMENT						CON
BERRIEN	I-94 EB	I-94 EASTBOUND OVER I-94 BUSINESS LOOP (LAKESHORE DRIVE)	BRIDGE REPLACEMENT						CON
BERRIEN	I-94 WB	I-94 WESTBOUND OVER I-94 BUSINESS LOOP (LAKESHORE DRIVE)	BRIDGE REPLACEMENT						CON
BERRIEN	I-94	WASHINGTON AVENUE OVER I-94	OVERLAY - EPOXY						CON
BERRIEN	I-94 EB	I-94 EASTBOUND OVER LINCOLN AVENUE	OVERLAY - SHALLOW						CON
BERRIEN	I-94 WB	I-94 WESTBOUND OVER LINCOLN AVENUE	OVERLAY - SHALLOW						CON
BERRIEN	I-94 WB	I-196 TO 0.7 MILES WEST OF M-140	ROAD REHABILITATION	5.375					CON
BERRIEN	M-139	OVER BUCKHORN CREEK, NORTH OF ROCKY WOOD ROAD	RECONSTRUCTION	0.191			CON		
BERRIEN	M-51	CHESTNUT LANE TO M-60BR	RECONSTRUCTION	3.543				CON	
BERRIEN	M-51	US-12 EASTBOUND OVER M-51	BRIDGE REMOVAL					CON	
BERRIEN	M-51	US-12 WESTBOUND OVER M-51	BRIDGE REMOVAL					CON	
BERRIEN	US-12	DAYTON LAKE ROAD TO MAYFLOWER ROAD	ROAD REHABILITATION	6.854		CON			
BERRIEN	US-12	INDIANA/MICHIGAN STATE LINE TO MONROE STREET	ROAD REHABILITATION	3.141		CON			
BERRIEN	US-31 NB	US-12 TO M-139	ROAD REHABILITATION	12.261				CON	
BRANCH	US-12	US-12 BRIDGE OVER THE COLDWATER RIVER TO WEST OF WESTERN AVENUE	ROAD REHABILITATION	0.452				CON	
CALHOUN	I-69	N DRIVE NORTH (EXIT 42) TO EATON COUNTY LINE	RECONSTRUCTION	5.004			CON		
CALHOUN	I-94 BL	HELMER ROAD TO SOUTHBOUND I-194 ON-RAMP	ROAD REHABILITATION	2.916	CON				
CALHOUN	M-199 (25 1/2 Mile Road)	27 MILE ROAD TO I-94	ROAD REHABILITATION	2.938	CON				
CALHOUN	M-199 (East Michigan Avenue)	25 1/2 MILE ROAD TO I-94 BUSINESS LOOP (SUPERIOR STREET)	ROAD REHABILITATION	2.937	CON				
CASS	M-51	NILES TO DOWAGIAC	ROAD REHABILITATION	11.504	CON				
CASS	M-60	M-60/US-12 INTERCHANGE TO END OF DIVIDED	ROAD REHABILITATION	3.555		CON			
KALAMAZOO	I-94	EAST OF LOVERS LANE TO EAST OF PORTAGE ROAD	MAJOR WIDENING	1.248		CON			
KALAMAZOO	I-94	I-94 OVER PORTAGE ROAD	BRIDGE REPLACEMENT			CON			
KALAMAZOO	I-94	KILGORE ROAD OVER I-94	BRIDGE REPLACEMENT			CON			
KALAMAZOO	I-94	PORTAGE ROAD TO SPRINKLE ROAD	MAJOR WIDENING	1.182		CON			
KALAMAZOO	I-94	I-94 OVER DAVIS CREEK	CULVERT REPLACEMENT			CON			
KALAMAZOO	I-94	I-94 OVER DAVIS CREEK	CULVERT REPLACEMENT			CON			
KALAMAZOO	I-94	I-94 OVER NORFOLK SOUTHERN	BRIDGE REPLACEMENT	1.182		CON			
KALAMAZOO	I-94 EB	I-94 EASTBOUND OVER GTW RAILROAD	BRIDGE REPLACEMENT			CON			
KALAMAZOO	I-94 WB	I-94 WESTBOUND OVER GTW RAILROAD	BRIDGE REPLACEMENT			CON			
KALAMAZOO	US-131 BR	WESTNEDGE AVENUE TO US-131	ROAD REHABILITATION	4.608	CON				
ST. JOSEPH	US-12	GRAND ELK RAILROAD TO GRASS LAKE LANE	ROAD REHABILITATION	4.660		CON			
VAN BUREN	I-94 EB	WEST OF M-51 TO 40TH STREET	ROAD REHABILITATION	2.792			CON		
VAN BUREN	M-40	72ND STREET TO SOUTH OF LAGRAVE STREET	ROAD REHABILITATION	3.402				CON	
				95.598					

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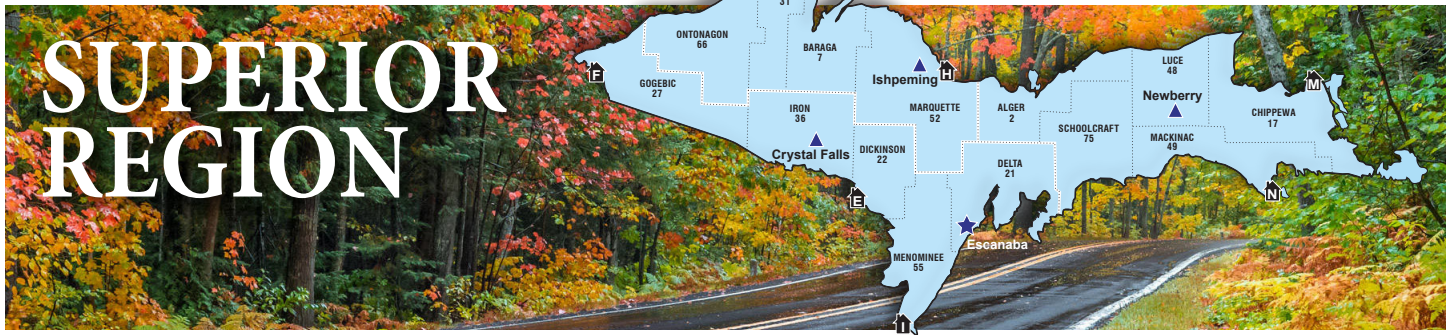
2020-2024 FIVE-YEAR TRANSPORTATION PROGRAM

SOUTHWEST REGION

NEW ROADS

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2020	2021	2022	2023	2024
BERRIEN	US-31	NORTH OF NAPIER AVENUE (EXIT 24) TO I-94	NEW ROAD - RELOCATING AN EXISTING R	1.904	CON	CON	CON	CON	CON
BERRIEN	US-31	NORTH OF NAPIER AVENUE (EXIT 24) TO I-94	NEW ROAD - RELOCATING AN EXISTING R		PE	PE	PE	PE	
BERRIEN	US-31	NORTH OF NAPIER AVENUE (EXIT 24) TO I-94	NEW ROAD - RELOCATING AN EXISTING R		UTL	UTL			
BERRIEN	US-31	NORTH OF NAPIER ROAD TO I-94	NEW ROAD - RELOCATING AN EXISTING R		ROW	ROW	ROW		
				1.904					

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**SUPERIOR REGION****BRIDGE - PRESERVATION**

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2020	2021	2022	2023	2024
BARAGA	US-41	US-41 OVER LAKE RUTH	DECK PATCHING - FULL DEPTH		CON				
CHIPPEWA	I-75	M-48 OVER I-75, US-2	OVERLAY - DEEP						CON
MENOMINEE	M-35	M-35 OVER DEER CREEK	SUPERSTRUCTURE REPAIR - CONCRETE		CON				
ONTONAGON	US-45	US-45 OVER ROSELAWN CREEK	SUPERSTRUCTURE REPAIR - STEEL			CON			

SUPERIOR REGION**BRIDGE REPLACEMENT**

ALGER	US-41	US-41 OVER WEST BRANCH WHITEFISH RIVER	DECK REPLACEMENT				CON		
IRON	US-141	US-141 OVER EAST BRANCH NET RIVER	DECK REPLACEMENT				CON		
MARQUETTE	US-41	OLD M-28 OVER CARP RIVER	BRIDGE REMOVAL					CON	
MENOMINEE	US-2	US-2 OVER BIG CEDAR RIVER	BRIDGE REPLACEMENT			CON			
ONTONAGON	M-26	M-26 OVER WEST BRANCH FIRESTEEL RIVER	BRIDGE REPLACEMENT		CON				
ONTONAGON	M-26	M-26 OVER EAST BRANCH FIRESTEEL RIVER	BRIDGE REPLACEMENT		CON				
ONTONAGON	M-64	M-64 OVER FLOODWOOD RIVER	DECK REPLACEMENT			CON			

SUPERIOR REGION**REPAIR AND REBUILD ROADS**

ALGER	M-28	FROM EAST OF CHRISTMAS TO RAILROAD CROSSING SOUTH OF MUNISING	RECONSTRUCTION	4.719	CON				
ALGER	M-28	FROM ONOTA STREET TO THE ALGER/SCHOOLCRAFT COUNTY LINE	ROAD REHABILITATION	15.568			CON		
BARAGA	US-41	US-41, COVINGTON AND SPUR TOWNSHIPS, BARAGA COUNTY	RECONSTRUCTION	5.269	CON				
BARAGA	US-41/M-28	FROM PINE STREET IN THREE LAKES TO THE PRL EAST OF TIOGA CREEK	ROAD REHABILITATION	4.388		CON			
BARAGA	US-41/M-28	M-28 TO NESTORIA HERMAN ROAD	ROAD REHABILITATION	7.542			CON		
CHIPPEWA	M-123	M-123 FROM M-28 TO THE NORTH 7.4 MILES	ROAD REHABILITATION	7.400		CON			
CHIPPEWA	M-129	FROM 10 MILE ROAD TO 18TH AVENUE IN SAULT STE MARIE	ROAD REHABILITATION	8.027				CON	
CHIPPEWA	M-28	FROM I-75 TO M-129	ROAD REHABILITATION	2.693		CON			
CHIPPEWA	M-28	M-28 FROM M-221 TO I-75	ROAD REHABILITATION	7.998	CON				
CHIPPEWA	M-28	FROM EAST OF RACO TO M-221	ROAD REHABILITATION	5.917				CON	
DELTA	M-69	FROM THE DELTA COUNTY LINE EASTERLY TO US-2.	ROAD REHABILITATION	5.229		CON			
DELTA	US-2	EASTBOUND US-2 BETWEEN GLADSTONE AND RAPID RIVER	ROAD REHABILITATION	5.549	CON				
DICKINSON	M-95 (Carpenter Avenue)	FROM MORIN STREET TO WOODWARD AVENUE IN KINGSFORD	ROAD REHABILITATION	1.185				CON	
DICKINSON	US-2	FROM C STREET TO WEST OF FIFTH AVENUE IN THE CITY OF NORWAY	ROAD REHABILITATION	2.295		CON			
GOGEBIC	US-2 (Lead Street)	POWDERMILL CREEK TO OLD US-2	RECONSTRUCTION	1.813		CON			
GOGEBIC	US-2	FROM EDDY STREET TO PIERCE STREET IN THE CITY OF WAKEFIELD	ROAD REHABILITATION	1.040		CON			

2020-2024 FIVE-YEAR TRANSPORTATION PROGRAM

SUPERIOR REGION

REPAIR AND REBUILD ROADS

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2020	2021	2022	2023	2024
GOGEBIC	US-45	LAC VIEUX DESERT BAND OF CHIPPEWA INDIANS CASINO FRONTAGE	MAJOR WIDENING	0.610	CON				
HOUGHTON	US-41 (College Avenue)	US-41 FROM MACINNES DRIVE TO ISLE ROYAL STREET	RECONSTRUCTION	0.893		CON			
HOUGHTON	US-41	US-41 FROM NORTH OF INGOT STREET TO AGENT STREET	ROAD REHABILITATION	8.328	CON				
IRON	US-2	FROM THE STATE LINE NORTHERLY TO NORTH OF COUNTY ROAD. 424.	ROAD REHABILITATION	7.392					CON
LUCE	M-123	FROM NORTH OF RAILROAD STREET TO NORTH OF COUNTY ROAD 407	ROAD REHABILITATION	4.283		CON			
MACKINAC	M-117	FROM US-2 TO THE MACKINAC/LUCE COUNTY LINE	ROAD REHABILITATION	9.974				CON	
MACKINAC	US-2	BETWEEN HIAWATHA TRAIL AND CUT RIVER, MACKINAC COUNTY	NEW ROADS	1.392	CON				
MACKINAC	US-2	FROM EAST OF WILDWOOD DRIVE TO EAST OF BREVORT LAKE ROAD	ROAD REHABILITATION	7.796		CON			
MARQUETTE	M-35	FROM MARSHALL DRIVE TO THE EAST BRANCH OF ESCANABA RIVER	ROAD REHABILITATION	2.089				CON	
MARQUETTE	M-94	FROM M-553 TO US-41, GAPPING FROM A AVENUE TO 5TH STREET	ROAD REHABILITATION	9.499		CON			
MARQUETTE	US-41	US-41 FROM BIG CREEK ROAD NORTHERLY TO M-28	ROAD REHABILITATION	3.134				CON	
MARQUETTE	US-41	US-41 FROM WEST OF BRICKYARD ROAD NORTHERLY TO IRO	ROAD REHABILITATION	6.355				CON	
MARQUETTE	US-41	FROM JUST SOUTH OF M-94 EAST JUNCTION NORTH TO BIG CREEK ROAD	ROAD REHABILITATION	9.029					CON
MARQUETTE	US-41/M-28	US-41/M-28 FROM FRONT STREET TO COUNTY ROAD HEADQUARTERS	ROAD REHABILITATION	2.652		CON			
MARQUETTE	US-41/M-28	FURNACE STREET TO US-41 BYPASS	RECONSTRUCTION	0.374			CON		
MENOMINEE	US-41	FROM MENOMINEE TO WALLACE	ROAD REHABILITATION	12.336			CON		
MENOMINEE	US-41	US-41 FROM WALLACE TO STEPHENSON	ROAD REHABILITATION	5.702			CON		
ONTONAGON	M-26	THE WEST BRANCH TO NORTH OF THE EAST BRANCH OF THE FIRESTEEL RIVER	RECONSTRUCTION	1.300	CON				
ONTONAGON	M-28	FROM M-64 NORTH JUNCTION IN BERGLAND TO AIRPORT ROAD WEST	ROAD REHABILITATION	14.076					CON
ONTONAGON	US-45	FROM M-26 TO GREENLAND ROAD IN THE VILLAGE OF ONTONAGON	ROAD REHABILITATION	13.845		CON			
SCHOOLCRAFT	M-77	FROM 0.2 MILES NORTH OF COUNTY ROAD 451 TO AMES LAKE ROAD	ROAD REHABILITATION	0.637				CON	
				208.328					

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UNIVERSITY REGION

BRIDGE - PRESERVATION

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2020	2021	2022	2023	2024
CLINTON	I-69	LOWELL ROAD OVER I-69	OVERLAY - EPOXY			CON			
CLINTON	I-69 SB	I-69 SOUTHBOUND OVER CSX RAILROAD	OVERLAY - EPOXY			CON			
CLINTON	I-69	AIRPORT ROAD OVER I-69	OVERLAY - EPOXY			CON			
CLINTON	I-69 SB	I-69 SOUTHBOUND OVER EASTBOUND TURNING ROADWAY	OVERLAY - EPOXY			CON			
CLINTON	I-69 NB	I-69 NORTHBOUND OVER EASTBOUND TURNING ROADWAY	OVERLAY - EPOXY			CON			
CLINTON	I-69 SB	I-69 SOUTHBOUND OVER I-96 BUSINESS LOOP GRAND RIVER AVENUE	OVERLAY - EPOXY			CON			
CLINTON	I-69 NB	I-69 NORTHBOUND OVER I-96 BUSINESS LOOP GRAND RIVER AVENUE	OVERLAY - EPOXY			CON			
CLINTON	I-69 SB	I-69 SOUTHBOUND OVER I-96	OVERLAY - EPOXY			CON			
CLINTON	I-69	FRANCIS ROAD OVER EASTBOUND AND WESTBOUND TURNING ROAD	OVERLAY - EPOXY			CON			
CLINTON	I-69	EASTBOUND TURNING ROADWAY OVER I-96	OVERLAY - EPOXY			CON			
EATON	I-496 EB	I-96 EASTBOUND TO I-496 EASTBOUND OVER I-96	BEARING REALIGNMENT		CON				
EATON	I-496 WB	I-496 WESTBOUND OVER I-96	OVERLAY - EPOXY		CON				
EATON	I-496	CANAL ROAD OVER I-496 RAMP	DECK PATCHING - FULL DEPTH		CON				
EATON	I-496	CANAL ROAD OVER I-496	DECK PATCHING - FULL DEPTH		CON				
EATON	I-496	CREYTS ROAD NORTHBOUND OVER I-496	MISCELLANEOUS REHABILITATION		CON				
EATON	I-496	SNOW ROAD OVER I-496	SUBSTRUCTURE PATCHING		CON				
EATON	I-496 WB	I-496 WESTBOUND OVER WAVERLY ROAD	BRIDGE BARRIER RAILING REPLACE		CON				
EATON	I-496 EB	I-496 EASTBOUND OVER WAVERLY ROAD	BRIDGE BARRIER RAILING REPLACE		CON				
EATON	I-496 WB	I-496 WESTBOUND TO I-96 EASTBOUND OVER I-96 EASTBOUND TO I-496 EASTBOUND RAMP C	OVERLAY - EPOXY		CON				
EATON	I-496	CREYTS ROAD SOUTHBOUND OVER I-496	OVERLAY - EPOXY		CON				
EATON	I-496	CANAL ROAD OVER I-496	OVERLAY - EPOXY		CON				
EATON	I-69 SB	I-69 SOUTHBOUND OVER INDIAN CREEK	OVERLAY - EPOXY		CON				
EATON	I-69 NB	I-69 NORTHBOUND OVER INDIAN CREEK	OVERLAY - EPOXY		CON				
EATON	I-69 SB	I-69 SOUTHBOUND ON RAMP OVER INDIAN CREEK	OVERLAY - EPOXY		CON				
EATON	I-69 NB	I-69 NORTHBOUND OFF RAMP OVER INDIAN CREEK	OVERLAY - EPOXY		CON				
EATON	I-69 SB	I-69 SOUTHBOUND OVER BIG CREEK	OVERLAY - EPOXY		CON				
EATON	I-69 NB	I-69 NORTHBOUND OVER BIG CREEK	OVERLAY - DEEP		CON				
EATON	I-69	BASE LINE HIGHWAY OVER I-69	OVERLAY - EPOXY		CON				
EATON	I-69	BUTTERFIELD HIGHWAY M-78 OVER I-69	OVERLAY - EPOXY		CON				
EATON	I-69	SHERWOOD ROAD OVER I-69	OVERLAY - DEEP		CON				
EATON	I-69	AINGER ROAD OVER I-69	OVERLAY - EPOXY		CON				
EATON	I-69 SB	I-69 SOUTHBOUND OVER STINE ROAD	OVERLAY - DEEP		CON				
EATON	I-69 NB	I-69 NORTHBOUND OVER STINE ROAD	OVERLAY - EPOXY				CON		
EATON	I-69 NB (Five Point Highway)	I-69 NORTHBOUND OVER BATTLE CREEK RIVER	OVERLAY - EPOXY				CON		
EATON	I-69 SB (Five Point Highway)	I-69 SOUTHBOUND OVER BATTLE CREEK RIVER	OVERLAY - EPOXY				CON		
EATON	I-69 SB (Five Point Highway)	I-69 SOUTHBOUND OVER GTW RAILROAD	OVERLAY - EPOXY				CON		

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2020-2024 FIVE-YEAR TRANSPORTATION PROGRAM

UNIVERSITY REGION

BRIDGE - PRESERVATION

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2020	2021	2022	2023	2024
EATON	I-69 (Five Point Highway)	I-69 BUSINESS LOOP OVER I-69	OVERLAY - EPOXY				CON		
EATON	I-69 (Five Point Highway)	KALAMO ROAD OVER I-69	OVERLAY - EPOXY				CON		
EATON	I-69 (Five Point Highway)	M-50 OVER I-69	OVERLAY - EPOXY				CON		
EATON	I-69 (Five Point Highway)	FIVE POINT HIGHWAY OVER I-69	OVERLAY - DEEP				CON		
EATON	I-69 (Five Point Highway)	ISLAND HIGHWAY OVER I-69	OVERLAY - EPOXY				CON		
EATON	I-69	I-96 EASTBOUND OVER GRAND RIVER	OVERLAY - EPOXY			CON			
EATON	I-69	I-96 WESTBOUND OVER GRAND RIVER	OVERLAY - EPOXY			CON			
EATON	I-69 SB	I-69 SOUTHBOUND TO I-96 EASTBOUND OVER GRAND RIVER	OVERLAY - EPOXY			CON			
INGHAM	I-496 WB	I-496 WESTBOUND OVER I-496 RAMP TO LANSING ROAD	BRIDGE BARRIER RAILING REPLACE		CON				
INGHAM	I-96 WB	I-96 WESTBOUND OVER M-99	OVERLAY - DEEP						CON
INGHAM	I-96 EB	I-96 EASTBOUND OVER WASHINGTON AVENUE	OVERLAY - DEEP						CON
INGHAM	I-96 WB	I-96 WESTBOUND OVER WASHINGTON AVENUE	OVERLAY - DEEP						CON
INGHAM	I-96 BL (South Cedar Street)	I-96 BUSINESS LOOP OVER GTW RAILROAD, SOUTH STREET AND RED CEDAR	OVERLAY - EPOXY				CON		
INGHAM	I-96 BL (South Cedar Street)	US-27 BUSINESS ROUTE OVER CSX RAILROAD AND WESTBOUND I-96 BUSINESS ROUTE	OVERLAY - EPOXY				CON		
INGHAM	M-36	M-36 OVER SYCAMORE CREEK	OVERLAY - EPOXY						CON
JACKSON	US-127 NB	US-127 NORTHBOUND OVER CONRAIL	OVERLAY - EPOXY					CON	
JACKSON	US-127SB	US-127 SOUTHBOUND OVER CONRAIL	OVERLAY - EPOXY					CON	
JACKSON	US-127	SPRINGPORT ROAD OVER US-127	OVERLAY - EPOXY					CON	
MONROE	I-75	LUNA PIER ROAD OVER I-75	OVERLAY - EPOXY			CON			
MONROE	I-75	OTTER CREEK ROAD OVER I-75	OVERLAY - EPOXY			CON			
MONROE	I-75	GAYNIER ROAD OVER I-75	OVERLAY - EPOXY			CON			
MONROE	I-75	READY ROAD OVER I-75	OVERLAY - EPOXY						CON
MONROE	US-23	PLANK ROAD OVER US-23	SUPERSTRUCTURE REPAIR - STEEL				CON		
WASHTENAW	I-94	I-94 OVER I-94 BUSINESS LOOP	OVERLAY - EPOXY					CON	
WASHTENAW	I-94 EB	I-94 EASTBOUND OVER MILL CREEK	OVERLAY - EPOXY					CON	
WASHTENAW	I-94 WB	I-94 WESTBOUND OVER MILL CREEK	OVERLAY - EPOXY					CON	
WASHTENAW	I-94 EB	I-94 EASTBOUND OVER CONRAIL	OVERLAY - EPOXY					CON	
WASHTENAW	I-94	NOTTEN ROAD OVER I-94	OVERLAY - EPOXY					CON	
WASHTENAW	I-94	KALMBACH ROAD OVER I-94	OVERLAY - DEEP					CON	
WASHTENAW	I-94	M-52 OVER I-94	OVERLAY - EPOXY					CON	
WASHTENAW	I-94	FREER ROAD OVER I-94	OVERLAY - EPOXY					CON	
WASHTENAW	I-94	OLD US-12 OVER I-94	OVERLAY - EPOXY					CON	
WASHTENAW	I-94	JACKSON AVENUE WESTBOUND, 94 BUSINESS ROUTE OVER I-94 RAMP	OVERLAY - EPOXY					CON	
WASHTENAW	US-23 SB/M-14 EB	US-23 SOUTHBOUND, M-14 EASTBOUND OVER MDOT RAILROAD	OVERLAY - EPOXY						CON

UNIVERSITY REGION

BRIDGE REPLACEMENT

EATON	I-69 NB	I-69 NORTHBOUND OVER GTW RAILROAD	SUPERSTRUCTURE REPLACEMENT				CON		
EATON	I-69 BL	I-69 BUSINESS LOOP OVER BATTLE CREEK RIVER	BRIDGE REPLACEMENT						CON
INGHAM	I-496 WB	I-496 WESTBOUND RAMP OVER CSX RAILROAD	BRIDGE REPLACEMENT				CON		
INGHAM	I-496 EB	I-496 EASTBOUND OVER I-496 RAMP TO LANSING ROAD	DECK REPLACEMENT		CON				
INGHAM	I-96 EB	I-96 EASTBOUND OVER M-99	DECK REPLACEMENT						CON
INGHAM	I-96 BL (South Cedar Street)	I-96 BUSINESS LOOP OVER HORESBROOK CREEK	CULVERT REPLACEMENT				CON		
JACKSON	M-60 EB	M-60 EASTBOUND RMP I-94 OVER I-94	BRIDGE REPLACEMENT		CON				
JACKSON	M-60 WB	M-60 WESTBOUND RAMP I-94 OVER I-94	BRIDGE REPLACEMENT		CON				
LIVINGSTON	I-96 WB	I-96 BUSINESS LOOP (ON RAMP) OVER I-96 WESTBOUND	DECK REPLACEMENT					CON	
MONROE	I-75	LAPLAISANCE ROAD OVER I-75	BRIDGE REPLACEMENT			CON			

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BRIDGE REPLACEMENT

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2020	2021	2022	2023	2024
MONROE	I-75 NB (Detroit-Toledo Freeway)	I-75 NORTHBOUND OVER MUDDY CREEK	BRIDGE REPLACEMENT			CON			
MONROE	I-75 SB (Detroit-Toledo Freeway)	I-75 SOUTHBOUND OVER MUDDY CREEK	BRIDGE REPLACEMENT			CON			
MONROE	I-75 NB (Detroit-Toledo Freeway)	I-75 NORTHBOUND OVER OTTER CREEK	BRIDGE REPLACEMENT			CON			
MONROE	I-75 SB (Detroit-Toledo Freeway)	I-75 SOUTHBOUND OVER OTTER CREEK	BRIDGE REPLACEMENT			CON			
MONROE	I-75 NB (Detroit-Toledo Freeway)	I-75 NORTHBOUND OVER SWAN CREEK	DECK REPLACEMENT						CON
MONROE	I-75 SB (Detroit-Toledo Freeway)	I-75 SOUTHBOUND OVER SWAN CREEK	DECK REPLACEMENT						CON
MONROE	I-75	NADEAUX ROAD OVER I-75	BRIDGE REPLACEMENT						CON
MONROE	US-23	STERNS ROAD OVER US-23	BRIDGE REPLACEMENT					CON	
MONROE	US-23	CONSEAR ROAD OVER US-23	BRIDGE REPLACEMENT					CON	
MONROE	US-23	IDA WEST ROAD OVER US-23	BRIDGE REPLACEMENT					CON	
WASHTENAW	US-23	STONY CREEK ROAD OVER US-23	DECK REPLACEMENT						CON

UNIVERSITY REGION

REPAIR AND REBUILD ROADS

CLINTON	I-69	I-96 TO AIRPORT ROAD	RECONSTRUCTION	5.391		CON			
CLINTON	I-96	IONIA/CLINTON COUNTY LINE TO 1,200' FEET WEST OF WACOUST	ROAD REHABILITATION	7.035		CON			
CLINTON	US-127	US-127 FROM SOUTH OF M-43 TO 875 FEET SOUTH OF CLARK ROAD	ROAD REHABILITATION	5.149			CON		
EATON	I-496	I-496 FROM I-96 TO LANSING ROAD	RECONSTRUCTION	4.529	CON				
EATON	I-69	0.5 MILES SOUTH OF CALHOUN/EATON COUNTY LINE TO NYE HIGHWAY	RECONSTRUCTION	6.039	CON				
EATON	I-69	NYE HIGHWAY (PAGE DRAIN) TO ISLAND HIGHWAY	RECONSTRUCTION	7.439					CON
EATON	M-99 NB	NORTHBOUND M-99, PETRIEVILLE TO COLUMBIA	ROAD REHABILITATION	3.138		CON			
EATON	M-99 SB	SOUTHBOUND M-99 PETRIEVILLE TO COLUMBIA	ROAD REHABILITATION	3.063		CON			
INGHAM	M-43 (Grand River Avenue)	PARK LAKE ROAD TO DOBIE ROAD	ROAD REHABILITATION	2.073				CON	
INGHAM	M-99	M-99 FROM 1,700 FEET NORTH OF HOLT HIGHWAY TO EDGEWOOD	RECONSTRUCTION	2.376			CON		
JACKSON	I-94	I-94 AT ELM ROAD	RECONSTRUCTION	1.499		CON			
JACKSON	I-94	ELM ROAD OVER I-94	BRIDGE REPLACEMENT			CON			
JACKSON	I-94	MICHIGAN AVENUE TO M-60	RECONSTRUCTION	7.583				CON	
JACKSON	I-94	I-94 UNDER LANSING AVENUE	RECONSTRUCTION	0.464		CON			
JACKSON	I-94	LANSING AVENUE OVER I-94	BRIDGE REPLACEMENT			CON			
JACKSON	M-60	EMERSON ROAD TO RENFREW ROAD	ROAD REHABILITATION	2.528			CON		
JACKSON	US-127	NORTH OF HENRY ROAD TO JACKSON/INGHAM COUNTY LINE	ROAD REHABILITATION	5.037		CON			
LENAAWEE	M-34 (Carleton Road)	M-34, HUGHES HIGHWAY TO HAZEN CREEK, M-156 STATE LINE TO PARK ROAD	ROAD REHABILITATION	9.590		CON			
LENAAWEE	US-223	US-127 AND US-223 FROM US-12 TO STODDARD ROAD	ROAD REHABILITATION	12.050			CON		
LIVINGSTON	I-96	I-96 FROM CHILSON TO DORR	ROAD REHABILITATION	3.708				CON	
LIVINGSTON	M-59	WEST OF LAKENA ROAD TO THE COUNTY LINE	ROAD REHABILITATION	3.309			CON		
LIVINGSTON	US-23 NB	NORTHBOUND US-23 BETWEEN 8 MILE AND M-36	OPERATION IMPROVEMENTS	0.413	CON				
LIVINGSTON	OLD 155	MICHIGAN AVENUE TO POINT OF ENDING (HIGH HILCREST DRIVE)	ROAD REHABILITATION	2.435		CON			
LIVINGSTON	US-23	US-23 SILVER LAKE ROAD TO ONE MILE NORTH OF SPENCER	ROAD REHABILITATION	5.861		CON			
MONROE	I-75	I-75 FROM ERIE ROAD TO OTTER CREEK ROAD	RECONSTRUCTION	3.731		CON			
MONROE	I-75	OTTER CREEK TO LAPLAISANCE ROAD	RECONSTRUCTION	3.234					CON
MONROE	US-24	LABO TO WAYNE COUNTY LINE	ROAD REHABILITATION	5.524	CON				

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UNIVERSITY REGION

REPAIR AND REBUILD ROADS

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2020	2021	2022	2023	2024
WASHTENAW	I-94	I-94 EAST JUNCTION OF US-12 TO WASHTENAW/WAYNE COUNTY LINE	ROAD REHABILITATION	2.355		CON			
WASHTENAW	I-94	WASHTENAW/JACKSON COUNTY LINE TO FREER	ROAD REHABILITATION	6.542				CON	
WASHTENAW	M-153	M-14 TO FRAINS LAKE ROAD	ROAD REHABILITATION	1.553		CON			
WASHTENAW	M-17 (Cross Street)	NORMAL TO MICHIGAN, I-94 TO MICHIGAN, HAMILTON TO ECORSE	ROAD REHABILITATION	1.736			CON		
WASHTENAW	US-12	US-12 FELDKAMP TO SALINE WEST CITY LIMITS	ROAD REHABILITATION	3.868	CON				
WASHTENAW	US-23 BR (Main Street)	I-94 BUSINESS LOOP TO M-14	ROAD REHABILITATION	1.239			CON		
				130.491					

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Acronyms

5YTP	Five-Year Transportation Program	DB	Design-Build
AADT	Average Annual Daily Traffic	DBFM	Design Build Finance Maintain
ACM	American Center for Mobility	DMS	Dynamic Message Sign
ACIP	Airport Capital Improvement Program	DSRC	Dedicated Short-Range Communications
ADA	Americans with Disabilities Act	EA	Environmental Assessment
APN	Alpena County Regional Airport	EB	Eastbound
ARRA	American Recovery and Reinvestment Act	EPE	Early Preliminary Engineering
ATDM	Active Traffic Demand Management	FAA	Federal Aviation Administration
AV	Automated Vehicle	FAST	Fixing America's Surface Transportation Act
BL	Business Loop	FEIS	Final Environmental Impact Statement
BMS	Bridge Management System	FHWA	Federal Highway Administration
BNA	Bridging North America	FTA	Federal Transit Administration
BRT	Bus Rapid Transit	FY	Fiscal Year
BUILD	Better Utilizing Investment to Leverage Development	Ghib	Gordie Howe International Bridge
CAV	Connected and Automated Vehicles	GPS	Global Positioning System
CFP	Call for Projects	HAWK	Hybrid Activated Crosswalk Beacon
CMAQ	Congestion Mitigation and Air Quality	HSIP	Highway Safety Improvement Plan
CNG	Compressed Natural Gas	HTF	Highway Trust Fund
CON	Construction	ITS	Intelligent Transportation Systems
CPM	Capital Preventive Maintenance	IWD	Gogebic Iron County Airport
CSS	Context Sensitive Solutions	LBO	Local Bus Operating
CTF	Comprehensive Transportation Fund	LTE	Long Term Evolution
CV	Connected Vehicle	MAAS	Mobility as a Service
		MAP-21	Moving Ahead for Progress in the 21st Century

Acronyms

MASP	Michigan Aviation System Plan	SAF	State Aeronautics Fund
MDNR	Michigan Department of Natural Resources	SEIS	Supplemental Environmental Impact Statement
MDOT	Michigan Department of Transportation	SHSP	Strategic Highway Safety Plan
MPO	Metropolitan Planning Organization	SMART	Suburban Mobility Authority for Regional Services
MEDC	Michigan Economic Development Corporation	SRTS	Safe Routes to School
MI BEST	Michigan Benefits Estimation System for Transportation	STC	State Transportation Commission
MOD	Mobility on Demand	STF	State Trunkline Fund
MTF	Michigan Transportation Fund	TAMP	Transportation Asset Management Plan
MSP	Michigan State Police	TAP	Transportation Alternatives Program
NACTO	National Association of City Transportation Officials	TDM	Transportation Demand Management
NBI	National Bridge Inventory	TIP	Transportation Improvement Program
OOR	Office of Rail	TOC	Transportation Operations Center
OPT	Office of Passenger Transportation	TPM	Transportation Performance Measure
ORTA	Office of Revenue and Tax Analysis	TSC	Transportation Service Center
P3	Public Private Partnership	TSMO	Transportation System Management and Operations
PCI	Pavement Condition Index	TZD	Toward Zero Deaths
PE	Preliminary Engineering	UAS	Unmanned Aerial Systems
PE-B	Preliminary Engineering - Bridge	USDOT	United States Department of Transportation
PRIIA	Passenger Rail Investment and Improvement Program	UTL	Utility Work
REMI	Regional Economic Models, Inc.	V2I	Vehicle-to-Infrastructure
ROW	Right-of-Way	V2V	Vehicle-to-Vehicle
RSL	Remaining Service Life	VHT	Vehicle Hours Traveled
RSU	Roadside Unit	VMT	Vehicle Miles Traveled
RTA	Regional Transportation Authority	WB	Westbound
		WDBA	Windsor-Detroit Bridge Authority
		WisDOT	Wisconsin Department of Transportation

MICHIGAN DEPARTMENT
OF TRANSPORTATION

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services for economic benefit and improved quality of life.